

1909

Stridulation at Sentic Vale  
*T. gracilis* - Flight  
Accompanied by a tick  
tick tick sound  
when rising and alighting

*T. cyaneipennis* flight  
often accompanied by  
considerable whirring  
with a clatter upon  
alighting - something  
like the sound produced  
by *T. fallax*.

*T. cyaneus* makes a  
whirr especially when  
rising in flight. This  
noise is not as loud  
as that produced by  
*cyaneipennis* and  
is not accompanied  
by such a clatter.

1909

suddenly strikes  
red sands and on  
Klamath hills  
with western vegetation.  
This is much the same  
gradually becoming  
broken up to  
forests where back  
of the river cliffs the  
ground is covered  
with an evergreen  
covered with pine  
& fir forests where  
the ground is short  
grass with a little sage.  
Quite billings the well  
is more grassy.

Beginning to ascend to  
below Rheinland - Rugged  
country wooded & brush country  
Also came from the Pappewa  
falls to Duluth - Below  
toward St Paul farming  
country. Duluth to  
Brainerd less rugged  
much swampy land  
Brainerd to beyond  
Fargo wooded sparsely  
farming - Beyond Fargo  
to Jamestown prairie  
Beyond to a  
grassy bare rolling  
country after Mandan  
gradually becomes  
a little more grass  
and white sage app  
in beauty strips.  
Then in western N.D.

1909

A/

Saxon Wisconsin July 22

high, swampy grasses - Very wet.  
*Melanophus apicatus* common

" *mic. Parorgyza* like the most

plentiful species - Many nymphs  
in strawberry wild beds -

*Melanophus laticornis* > Almost  
all seen taken - Sweeping

\* method for quick sweep  
\* note their method -

3 *D. carolina* seen & taken

3 *Setligids* *Urophora* taken

by beating - Long search  
failed to get others but

many nymphs are also  
apparently a *Setligidea*

of nymphs. *M. femoratus*

taken - nymphs of *Cynophora*

*indiana* num. - 10 m. to 1 inch

lecting was done all  
along R. R. running through  
a *Tamarac* swamp.

1 *Cercotettix verruculatus* Rhinelanders Wis VIII. 23

A2 Wright Mine. VII. 24 -  
Carlton Co.

Specimens all taken in  
high grasses beside R.R.  
sweeping - *C. verruculatus*  
*D. carolina* sum. *Melanophus*  
*apertus*? very plentiful -

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Atkin Co.

at Old Mine VII. 24 In  
dry buckberry bushes and  
other such vegetation &  
1 *Chorthippus* 1 *M. lakinius* -  
Careful search failed to  
reveal anything along the  
R.R. of interest and even  
the species common in  
the grass were here scarce

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A3 Staples Mine VII. 24 -

*Aschelineura*, *Cono* ~~*varia*~~

*Melanophus* ~~*leucostictus*~~ *leucostictus*

*Sandheria* taken in ditch  
of high weeds -

A3 cont - Single *Trimerotropis*  
taken in sandy spot  
among strawberries & such  
plants - Among the  
same *M. labialis* common  
22 long wing form taken  
Also 1  $\frac{1}{2}$  ad. w. & Neelander  
and a ~~lot of~~ *Conophthalinus* -  
*Chalcidius conspersa*,  
*Chortippus* everywhere as  
well as *M. spretus*. *D.*  
*Carolina* seen.

A4 Mandan N. Dakota VII. 25  
In sparse vegetation at foot  
of river in the rolling country  
2 *Andrena rufipes* - a few  
nymphs also seen. 1 single  
*Andrena*. *M. spretus* - In  
thicker spots same location  
a few *Macropodellus* taken  
all just molted - a number  
nymphs seen - *as as* white  
large number *H. alba*

These ~~paracardi~~?

One *Archelimum* taken  
from Thistle in thick  
along stream *Saxifraga*  
*concepsiflora* & *M.*  
*fenestrata* (?) taken - In  
all these places orthoptera  
was by no means abundant  
in prairie vegetation  
(Specimen envelope ~~I~~)  
on upper slopes &  
Top of hills *M. ~~min~~*  
and *M. ~~pubescens~~*?  
were very plentiful but  
not swarming - The  
smaller in the lower  
places the other in grass  
*M. bowditchi* seen (12016)  
in similar place as  
last. *Asymphora*  
a few taken in same  
locality and 1 *A. ~~clavicornis~~*  
*Nymph* of *H. ~~trilineata~~*

seen on ~~middle~~ level.  
Large M. apertus ???  
Taken all on top of <sup>hill</sup> ~~grass~~  
in prairie grasses.  
Mentobryna Taken  
in grass at foot of hill  
not any others seen  
M. laticus? Few Taken  
mostly in prairie grasses.  
Great number? seen  
all of same species  
are a foot top hills.

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AS Dickinson N. Dakota VII. 25  
On rolling grass chiefly  
covered prairie - Butterflies  
very scarce - ~~Thompson~~  
the only sp. of which more  
than 1/2 doz were seen.  
Nothing interesting  
~~Chortippus~~ ~~known~~  
known of near now.

A 6 Glendive Mont. VII. 26

Hungry Joe Butte - Top

alt about 500 ft above town.

grassy swarms of *M. Kiowa*

a very few *Anilocara rufum*

Akent. *coloradus*, *M. infantilis*?

*M. minor*? <sup>1 Cordillerensis</sup> On edges in  
heavier grasses *M. spretus*?

*I. clavatus*. On bare  
slopes of butte *I. caeruleipennis*  
plentiful and *C. rabula*  
almost as thick -

*M. spretus*? and *aplopus*  
also plentiful in scant  
vegetation - 2 sp. *I.*



*melanoptera* group Taken  
high on ledges. At

foot along bare <sup>dry</sup> water  
courses *C. rabula* and  
*I. melanoptera*? ~~not~~  
numerous and *I.*

*caeruleipennis* common

*M. spretus* swarms in  
vegetation while west.

viola very common  
and ~~Aeg~~ plus common  
Metator found not  
scarce on edges of  
town in bare spots  
and in same location  
2 colonies of *vinulata*  
found. *M. fuscumbrum*  
taken in grass near R.R.  
1 ♀ *Chlocallis conspersa*  
taken in grasses at  
foot of hill - Rather  
singular - never found  
it before in more or  
less desert surroundings  
*M. infantilis*? *M. minor*?  
both not uncommon  
in same location.  
? *Tetragids* nymphs same place  
sage brush ~~Melanoplus~~ found  
fair mos. on sage and 1  
*Archimimus* taken from  
sage on plain - others

were nearly but owing  
to their extreme slenderness  
could not be located.  
Melanophyes brown but  
like *spretis cerci* =  Add.  
Taken on bush at top of  
Mesa - app. - a cercus.  
1 *Spharagamon* taken in  
dry stream bed also 3  
*Dacotilla*. Dark M.  
Life infertile?   
taken high on mesa side  
in bare spot near bushes  
M. bowditchi Top of mesa.  
1 *Harpobittis* foot of butte.  
A few in *Chlorotoma* near bottom  
both a few *Xiph* and *Picta*  
both numerous and up  
nearby flats 1 *Spharag*  
a few *Melanophyes*  
*Chlorotoma* - no diff  
species etc. *Xiph* and all  
others in *Chlorotoma*

A8 Foray the Mount V.H. 27

Seeds along Yellowstone R.

3 *Durostaphylos* 2 taken - 3 *Metastelma*

*Spharagnum* common also

*M. fume* sub in high weed

several *Opisia* *Tatun* in

dry grasses and a few

*Ant. rufum* 2 *M. Kiowa*

On grassy butte side.

*Miclostegus* not uncommon

1 *C. rubula*, 2 *T. melanop.*

2 *T. melanop.* like sp. a few

*Komphocerus* and *Wormia*

In cañon but better in

grain bushes *M.* like minor

*Stakus* also *M. spectus* ?

1 *Wormia* 2 *dictyoides* ?

In sage *Th. alta*

On top of buttes in low

grass mountain like

pastures - *Ag. rufum* common

also *cordillarius* a few

*Antlocar. aut.* taken

*Philobronia*

also *Akuntia* & ~~*Agave*~~  
2 ~~*mustobry*~~ *plattii*?

taken on bare boulder  
slope under junipers.

1 *M. agilis* ♀? in open  
pasture also *M. Kiowa*  
and a few *Opeia* in  
sage a few *Hesperotettix*  
1 *Xiphid* 1 *urlicat* & *X. Gold*  
mt. pasture *M. minor*? *u. infanti*?

The larger of *Cordillera*  
was taken on the more bare  
slopes of the butte - 1 *Ophi*  
flat near RR in grass.

I have noticed that there seem  
to be several species of closely  
allied *Melanophi*. 1st *M.*  
*sputer* proper found in grass  
and weeds and a more  
ornate var. found about  
sage and in more arid  
regions. Then *M. minor*?  
found usually in open

grassy places - Very plainly  
and well marked  
a very close appearing sp.  
is found ~~about~~ the sage  
and is colored much  
like M. sage sp. except  
it is darker and more  
heavy. There is another  
possible sp. one in a  
smaller more mottled  
insect almost app-  
ear aculeatus in appearance  
found in bushes & sage.  
There seem to be about  
3 species very close to  
M. minor? and ranging  
to M. sage sp. & aculeatus.  
I don't know if these are  
species at all but still  
they look it and may  
upon examination be  
found to differ. The  
Ephedra minor makes

a slight clatter about  
in flight usually  
as it alights. There  
is none of the typical  
sage brush prairie land  
here - Only sage brush  
mud flats and scattered  
growth on better slopes  
11-2 P.M. on top of buttes in  
open meadow - Several  
♂ H. alba beaten fr. sage  
Series of Cordillacus ♂ & ♀  
Aulocara beauty ♂ & 2 ♀  
~~Agrostis~~ common  
Ak. coloradensis ♂ & ♀  
1 Dactyloctenium pectinatum near  
depression in meadow  
where grew all the sage  
ant 1 Xiph. also ✓  
Mecynotarsus and  
grasses & bunches at foot  
of rocky slope. (all A.M.)  
about 10 Eratula seen

1 *Protholotus subannulatus* <sup>2</sup>  
from cage - 2 *Hedrotettix*

Taken on meadow.

1 ♂ *Trinotus tropis* *Edithalana*

Taken in juniper slope

1 ♀ seen - This was one

of the warmest species &

flew quickly & swiftly

some distance. 1 ♀ *Quintus*

Taken in *Nitu* meadow.

A rolling country here

rising slowly back of

the hills and dotted

with low pines & junipers.

Rock like and very beautiful.

1 marked *Arphia nitu* meadow

at hills 300 ft above town



No. 1. Halsey, Thomas Co., Neb.  
July 11, 1909. (On U. S. Forest  
Reserve. The first collection  
Elevation at station ab. 3000 feet  
was done before breakfast  
in some weeds at the  
base of the first hills  
to the south of the flood  
plain of the Middle  
of the Roubidou River.  
Here in tall grass and  
weeds several adult  
Gomphocerus were taken  
~~the~~ plant 1. and Travodes-  
contia were numerous,  
the sage colored immatures  
on plant 1. Stenobothrus  
was taken in a small  
rather wet area of  
tall grass. After break-  
fast work was taken

up in the flood plain on  
a mile to the east of the  
station and then up into  
the sandhills. - The latter  
being number 2 here.

One female Chloecallis  
conspersa was taken  
in grassy close to the  
station but lost. Eritettix  
was found along Long  
River in grass, thistle  
etc. Tettig. id. ditto.

No. 2. Sandhills at Halsey.  
about 100-165 ft. higher than first sta.  
Cincinnati in blow out to

One leg of a Udeopsylla seen.  
Diapheromera beaten out of the will  
 scrub, Brachystola  
 hopping through the same.  
Paraspinola, Eritethis  
 and Metacopius on  
 the grass and scrub.  
Poioessa on a bare spot.

See Phyto-geography  
of Nebraska. ~~Printed~~  
~~Clements.~~ in  
Botanical Survey of  
~~the~~ University of  
Nebraska. 1899 (2nd ed. 1901-  
1902)

No. 3. Flood-plain of Loup  
River and lowest slopes  
of the hills at Halsey,  
Thomas Co., Nebraska.

July 12, '09. In tall grass  
along the edge of a  
small grove of deciduous  
trees immediately west  
of the forestry station  
five males of Chalcid  
were taken by beating.  
No other specimens were  
seen in the locality where  
a female of this genus  
stipped me yesterday  
although it was very  
carefully examined. The  
amphitornus was

taken in <sup>poor</sup> grass east of house, - only one seen.

Pseudopomala on low slope immediately s. of house. Melanoplus and Cimex aloides in grassy places.

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No. 4. Sandhills within  $\frac{1}{2}$  m. to the south of Halsey Freshly Sta., Thomas Co., Neb. July 12, 09

Brachystola was taken

in sparse grass on the slopes of the hills - two taken, none others seen; Stipator (all seen taken) from more grassy and overgrown depressions between hills: various woody plants, some thorny and others of various character.

Trimerotropis agrestis found only <sup>on bare sand</sup> in blow outs, but one adult found but immatures numerous.

Paropomala occurred much  
as Pseudopomala in  
various places in the scattered  
grass tufts on the hills.

Hippiscus on bare sand in  
blow out - only one seen there.

Melanoplus pachardi occurred  
only in blow-outs, all seen  
taken. Psoloessa and Eritettix  
in grassy stretches of  
grass No. 2 and also in  
the ~~xxx~~ <sup>small</sup> Psoloessa around bare  
spots.

The sandhills have grass,  
thistle, Yucca filamentosa,  
No. 3 plant and several  
woody shrubs a portion  
of their covering.

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No. 5. Alliance, Box  
Butte Co., Nebraska.  
Elevation over 4000  
feet. July 14, 1909.

Collecting for a number  
of hours resulted in  
the capture of three adult  
Orthoptera, one Stirapleura  
and one Eritettix in prairie  
grass land and one  
Hippiscus in a bare spot  
in a prairie road. Immature  
Phyllotrimma, Agrostettix  
and Mesotobryma, while  
several immature Ampit-  
ornis were also taken.  
Everything from this locality  
in the way of Orthoptera  
was secured in prairie grass  
land region. Dragon-flies  
were numerous near  
a wet spot and several were  
taken. The red and black  
beetle was found only on  
thistle and the gray  
spotted Cantharis occurred  
on plant No. 5.

No. 6. Sterling, Logan Co., Colo.

Altitude 3890 feet.

July 15, 1909

In tall weeds and grass  
near an irrigating ditch  
Orthoptera was very scarce,  
much work revealing but  
one Melanoplus and two  
Eri-tettix.

No. 7. Sterling, Logan Co., Colo.

Sandhills, east side of valley  
of South Fork of Platte River.

Elevation 4000 - 4100 feet

July 15, 1909.

These sandhills are  
rolling exposing many  
bare slopes and innumerable  
small bare spots, the  
vegetation being sage  
(No. 6) with patches of  
short grass and a  
few other plants. A  
species of Hippiscus <sup>montanus</sup>  
was present, six specimens  
being seen and all taken.

Cordillacris was very scarce, one yersinia seen and taken (on bare sand)

Polioessa not common, immature  
Paropomala numerous, clinging<sup>there</sup> to grass, sage or other plants - no adults.

Holbrookia like lizard burrows under sage.

Adult Orthoptera very scarce.

Cicindela very scarce, one<sup>taken</sup>

One specimen of Hippiscus contained a thread worm  
at least 20 inches long

No. 8. Casper, Natrona Co., Wyoming  
Alt. - - - feet. July 17, 1909.

In rather low land along  
the North Platte comp.  
covered chiefly with the  
plants contained in  
envelope no 7. many  
immature Orthoptera

were found, but adults  
were limited to numbers  
of Scincrotopis virgulata  
a scattering of a ~~Scincro-~~  
~~topis~~ Melanophas &  
one specimen of Melanophas  
virgatus. Nothing else seen  
adult. Bufo numerous, one  
taken.

July 17, 1909.

(10.9) North Slope of Casper  
Range, Natrona Co., Wyo.  
About 8 miles distant from  
Casper and about a  
thousand feet higher.  
At the lower edge of the  
pine zone, sample No. 9.  
Gnaphocerus was taken  
only by beating a piece  
of steep mountain  
pasture land clothed  
with a number of low  
plants, some woody, with

scattered pines and out-  
croppings of rock, All the  
specimens of Melanoplus  
were found in similar situation,  
but preferably in the tallest  
and most succulent  
vegetation, except the  
single short-winged specimen  
which was taken about 200  
feet lower down in a flat  
meadowy spot where

Chorthippus and Camnula  
swarmed. Platyboterus  
was found only in the  
drier portions of the high  
pasture. Immature  
Chloecallis, Acrolophites  
and Amphitornis occurred  
in similar situation,  
while Camnula and  
Chorthippus occurred  
sparingly in the upper  
meadows, but in

X X X X X X X

warmers in the lower  
moister one. Here  
*Cannula* immatures  
were by thousands.

July, 18. 09  
Harrison, Sioux Co., Nbr.

A single female *Steno-*  
*pelmaticid* was found crawling  
over the boards of the porch  
of the hotel toward dusk.

10.10 July 19, 1909.

North slope of Pine Ridge,  
near Prairie Dog Canyon,  
Sioux Co., Nbr. Elev. approx-  
~~the~~ somewhat less than  
Harrison. All work was  
done in short and medium  
length grass land between  
the foothills of Pine Ridge  
- The edge of the Bad  
Lands. Immature  
*Brachystola* numerous,  
*Cordilleria* numerous

but difficult to capture  
being very swift jumpers.  
The three Acropophites were  
the only ones seen. Akuntetes  
numerous, but swift  
jumpers. Ulocara  
in fair numbers and  
Aeneotettix numerous.  
Melanoplus not common.  
Hypisaeus the only one  
seen. Immature. Orth.  
swarmed.

No. 11. Battle Mountain, east  
of Hot Springs, Fall River Co.,  
So. Dakota. July 21, 1909.

Elevations from 400 to 900  
feet above that of Hot Spgs.  
<sup>3750 ft to 4400 ft.</sup>

The slopes of Battle Mt.  
are most covered with  
scattered bull pine and  
interspersed with grassy  
area, often benches of a  
distinctly dry meadowy

type. In the lowest of these meadows Mesobregma was found to be numerous, while Cordillacris was scarce. Cordillacris and Melanoplus (at least 4 species) were pretty generally distributed, the short-winged ♀, however, being from near the highest point collected on, - only one seen.

The flabellifer type was very active. The single Desperotettix was taken about midway between the highest and lowest points collected at. Gomphoceris was chiefly high in grass land, where the two Chlocaltis and one Acanthoplistus were also taken. Brachystola, Ageneotettix and Aulocara were general, the latter sparingly. Gomph. Acanthoplistus general, most all immature. Phyllostoma

general, all immature.  
All species seen taken  
exc. immat. Xiphidion &  
pyllus. Mestobryma only  
in very short grass.

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No. 12 Sylvan Lake, Black  
Hills, Custer Co., So. Dakota.  
Alt. 6200-6300 feet. July 23, 1909.  
Collecting done on the  
slopes S.E. of the lake for a  
distance back of about one  
mile. Chlocallis found only  
in grassy spots near fallen  
trees, uncommon, only adult  
seen taken. Icthyids and Cicindelas  
in sunny spots on mica covered  
road. Melanophus altitudinarius  
in gro plant with berries  
(taken), on seedling pine, logs,  
stumps and in ~~the~~ roads, -  
almost all immature, only one or  
two adults got away, <sup>one of two</sup> the female  
captured was in a fallen

the other in grass.

tree, many male *Melanoplus*  
in low vegetation near  
and beside lake  
road. Shells from under  
stones. Camnula swarmed  
in immature condition by  
lake side, only adult seen  
captured.

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No. 13. Sylvan Lake, Black  
Hills, Custer Co., So. Dakota  
Alt. 6200 - 6500 feet. July 24, '09

Collecting done around  
the lake and at various  
places on the trail to the  
Needles. Nothing taken  
near the Needles except  
the two immat. Chloactes  
which were in high grassy  
spot at highest elevation.

Chorthippus in same  
spot.

No. 14. Newcastle, Weston  
Co., Wyoming. Elevation  
4300 - 4400 feet. July 25. '09.

Collecting was done to the S.E. of  
the town a distance of a half-a-mile  
to a mile in low hills covered  
very sparsely in the slopes and more  
thickly in the hollows with pine (P.  
scopulorum as far as I can determine).  
The slopes are very & long, frequently  
bare and again with  
scattered sage (No. 14) and  
many low cacti (Opuntia),  
while near the bases ~~the~~  
they are frequently quite grassy  
(grass very short). In the  
grassy situations Phlebotoma  
was most numerous, the  
majority, however, immature.  
Drin. cincta wild and not  
common; D. viniculata  
fairly numerous in the  
barren spots. Aeneostellus

more partial to grass, as  
was also the case with  
the kiowa type Mesobryne.

M. platter abundant all over  
the slopes and easy to capture.  
The two species of Melanophes  
not common & wild. Upis  
scarce - all the adults seen  
taken. Cicotettix, only the  
two taken seen - not particularly  
wild - made a distinct  
but rather low chatter.  
all species seen taken.

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No. 15. Sheridan, Sheridan  
Co., Wyoming. July 27, 1909.  
Alt. about 200-250 feet above  
R. R. Sta.

Collecting was done in the  
rolling country east of  
the station about a  
mile. The slopes of these  
hills around usually covered  
with sparse longer short

grass, some <sup>sparse</sup> clumps of  
sage brush, bare and  
baked soil in some places,  
stony in others, the grass  
tallest and most luxuriant  
between the hills. Mel. packardii  
& atkinsii types abundant,  
the former much easier to  
capture than the latter. Fryllus  
heard all around but not  
frequently seen. Hesperolettis  
not common in the adult  
condition, immature more  
numerous. Mitator scarce,  
all seen taken. Hadrotettix  
ditto, all <sup>seen</sup> taken. Aulocara  
a few, the single Amphitomon  
the only one seen. One  
Gymnocranius alone seen  
and taken - the more  
luxuriant grass between  
hills. Several patches of white  
sage with Hypochlora immat

Killings Mont 4.11.28 - Series  
 Sited in river flats and  
 along sides of batters very  
 steep here. *M. femoratus*  
*M. altatus* *avocatus*. *M.*  
*palearcti*, *femoratus* - common.  
 In swampy  
 place of ~~swampy~~ marsh  
 grasses a series of *Xiphid*  
*Archelampus* *Archelampus*  
 Taken from at *Neurobium*  
 of which one was taken  
 mature 1 occurrence -  
 In short grass on level  
 of 100' near batters found  
 2 sp. *Aulocara* *Melator*  
*Agrostis* 2 *A. <sup>maius</sup> <sup>rioua</sup> <sup>maius</sup>*  
 1 *Podellacris* 2 *M. minor*  
 (I have been calling these  
*M. immitis*? and *M. minor*?  
 is really the spatulate  
 one is species *Phlebotomus*

mainly miniature - the  
slopes a very few  
*Cynabula* and *Spharagmus*  
not uncommon also one  
*Acrolophus*. About  
sage numerous sage  
*metanopius* and high  
on steep butte side in  
a sort of wild gooseberry  
a number of *Apanteles*  
*unici* *melanopius*.  
1 *Sceloporus* taken on  
on butte side and one  
sage rabbit captured  
Several *Hesperotettix* taken  
on plain & butte side  
and *Apia* in grass.

alt 4500  
17 Livingston. Mont VII. 29 along  
yellowstone river - Beaten  
from bushes near river  
1 *Saxidomus* 1 *Acrichium*  
in field of fairly dry

grasses - 2 *Agrostis*  
 17 *Hippuris* common  
 30 *M. minor* group - very  
 common 1 *Autocarpa* 1  
 1 *Epilobium* 1 *Berula* *Melampy*  
 1 *Desmodium* 1 *Abutilon*  
 1 *Junonia* 1 *Trimeris*  
*Melampy* gr. 2 *Spharagnum*  
 3 *Z. monticola* 2 *Urtica*  
 a number *Gonolobus*  
 1 *M. allanii* common  
 Nest *Knova* very "  
 1 *Chortippus* taken in  
 damp grasses. In the  
 field *M. flabellifer* gr.  
 taken by considerable  
 search. Kovak and *Young*  
 the plant collected

18 *Lionelton* Mount V.H. 29  
 a fog bank with numerous  
 shattered cherty exposures  
 near the summit of  
 the south face at 5000

most of the hill was  
covered with short  
dry grasses - In the  
m. flabellifer was very  
common the not anaxus  
Hippiscus and M. monticola  
common - The former the  
more so. 1  $\frac{1}{2}$  mil. minor  
group. M. punctatus  
esp. at higher levels 2  
Acrotaphus - Onyx  
spp., M. packardii  
very common esp. in  
woods. Several Metator  
M. Kiowa common - On  
ridge of slope among  
fairly scant vegetation  
with tufts of (plant  
kept) everywhere 10  
pink leg short wing  
melanoplids Taken  
and 1 Anaxus - The  
10 were taken by the closest

and most vigorous  
scrutiny. The used  
were usually found in  
or near the clumps of  
leaved kept and when  
approached usually  
jumped about clumsily.  
Circotellus found in  
small numbers on short  
outcrops.

19. East Side Bozeman  
mt. Hallatin Range. VII. 30  
alt. mtn 7600 ft. Specimens  
taken at an elevation of  
6500. Saw a tall grass  
growing in dense growth  
of pine saplings. A  
number ~~Pod~~ oregonensis  
1 ~~Melanoplus~~ <sup>Chlorocallis</sup> 1/2 st. w.  
a few ~~Chlorocallis~~ <sup>Chlorocallis</sup> nymphs.  
In pine forest one  
Circotellus.

20. Summit Bozeman mtn  
7600 ft. In high grass  
glade at top <sup>east</sup> 1 m. ~~altitude~~  
a few *Gomphoceris* and  
*Podisma* <sup>1 *Podisma*</sup>. Arthrop scarce:  
<sup>almost</sup> all bare very steep slopes <sup>west</sup>  
with occasional conifers  
a series of *M. montanus*?  
was taken only by hard  
and long searching.  
*Phricotetix* also seen  
& taken *Gomphoceris*  
occasional — the sp.  
most commonly met  
here. A few *Amblyus*  
also taken. Lower on  
slopes dotted with narrow  
sage bushes & *Artemisia*  
alt about 7000. One  
*Cercatettix undulatus*?  
taken also at about  
7000 ft on ledge of  
rocks.

The m. mountains? or are  
very hard to catch  
They always spring down  
hill in a succession  
of leaps and unless  
headed off usually  
find some tangle in  
which to hide. The  
Platybothrus was taken  
in same location -

The Amphisp. above  
by wear that they  
have been on wing  
a long time - Spring  
Species? The black  
wing Lincothor is  
the most solitary  
of the species met  
and was always  
seen alone -  
1 m. trimeri taken from  
fir into which it  
had flown.

2/ *M. mullatum*? found more  
plentifully on slopes bare  
etc. occasional bushes  
on west slope alt  
6000-6500 ft. A few minute  
~~beetles~~ *Gonophocerus*  
etc. taken *Podisus* in  
small ones in weedy  
places - in typical  
Canadian pasture  
beside aspens -  
*Cumula* common  
2 *Chorthippus* (many types)  
*M. atlanis* 1 *M. titubans*  
in aspens 1 *Hippodamia*  
2 others of this species  
were taken on wet  
slopes among low brush  
the ♂ few signs. The ♀s  
were so weary they  
could hardly jump.

22 Harrison Mount VII. 31

In marsh grasses  
many weevils & 2 mature  
Chorthippus. On slopes  
of rock in front of station.  
*Pterostichus undulatus*?  
*M. athamus* common  
about station - On  
rolling hillsides  
above bluff. covered  
with prairie grass  
and rather bare in  
spots - *Circotellus*  
*carolinensis* & *Hesperius*  
common - C.c. local  
and found only about  
one hillside - 2  
*brachynotus* taken - 2  
*T. monticola* on bare  
spot. *Sci. M. infantis*?  
very common (the most)  
all other species were  
found in grass

land esp. on hill  
sides. Green upland  
taken in one small  
area same as C. carlin  
also 2 mature Stenodytes  
taken there. Cyclocarya  
in bare places. Homophora  
common in heaviest  
grasses. Long search  
was needed to get the  
9 Byadgaster & the  
series of green Melanophaga  
1 ♀ Platystrophia taken  
a very satisfactory collecting  
place about 300 ft - above  
R. R.

23 Missoula Mont VII. 31

On rolling steep hills covered with very dry grass - Myrmica & M. ruginodis in droves w occasional adults. On path 17. cyanipes flew up with great speed but alertness by it was taken.

Hesperus sp. bivittatus in street of town -

24 Paradise Mont VII. 31

In fields and edge of forest M. ruginodis swarms in myriads and mature are abundant. On edge of forest took a few Acorydum on low clover and 1 of sawflies beating in field

Took *Aulocara ellioti*  
*M. minor*? & *M. flabellip.* &  
*M. bivittatus* not uncommon  
in forest. *M. minor*? not  
scarce in bushes and  
a good series of *Brydopoda*  
taken in bunch grass in  
pine forest - Ideal. The  
♀ were usually up in the  
grass while the males were  
often found sitting on  
the ground - Stridulation  
faint something like  
*Chorthippus*.

---

25 Sand Point VIII. 2 Idaho -  
11 *Anabrus* like *Taper* in  
a low tangle of raspberry  
vines. Thistles growing  
about burned logs and  
stumps in field. The  
♂ were stridulating the  
ground very much like

(*Anabrus apokun* RUF)

× *Hydrom. fasciatus*  
Very faint for so  
large an insect. All  
the specimens were  
found crawling about  
on the ground. Not  
as vigorous as those  
taken in Yellowstone park  
and <sup>apparently</sup> did not have near  
by holes in which to

hide. *Circotellus* very  
very plentiful in streets  
and grass but especially  
so in burles - in latter  
light and, although this  
species could not be  
distinguished from  
*ovatus* *collatus*. A few  
M. fun. sub 1 M. *attans*  
taken in burles and  
grass. *Acrydium* on dry  
earth in burles. *Cercaria*  
fairly plentiful locally

*M. brevitarsis* and *M.*  
*faciatus* found in  
same place as *Anabrus*?  
latter series only taken  
by prolonged searching  
1 *Chorthippus* taken in  
grasses near woods. 1  
*Hemiteles*? taken in brush  
*epidoptera*

26 Hileyard Wash. Aug 3.

alt. 2000 ft. In rather  
bare plain of sparse  
grasses. *M. attenuis*  
abundant. The most plentiful  
species. *D. spurcalis* not  
quite common - fairly  
local in distribution.  
*Aulocara* found in few  
nos. everywhere on the  
plain - they use both  
salt power and wings  
and even the heavy ♀s  
are rather alert.

31. melanopt. sp. 2 Taken  
A very few *C. pellucida*  
*larphia* *fulviventris*  
*Melanopterus* like  
*parvulus* - *pinus* &  
flies vigorously taken  
A single *T. vire* group  
dark gray and a  
few *Hippisus* taken.  
*D. apurcata* stridulation  
consists of a crackling  
irregular noise usually  
made most loudly  
at the end of their flight  
The rustling of their wings  
is very distinct.

---

27 Little Baldy Hill Aug 3. State of  
Wash.  $117^{\circ}20'$  Long  $47^{\circ}42'N$ . Alt 2600

On summit in grass  
along edge of oat field where  
a few cone bushes and young  
trees were growing -

Amphibolurus common - The  
sp. most plent. M. apertus

Common 1 Chorthippus oregon  
1 Cicada montana 2 dictyds  
a few Anelocera taken.

The aspidopler was  
found in grasses ~~near~~  
~~low down~~ where they were  
a little more heavy than  
usual - dictyds & Cicada

the same place -  
On almost bare  
sides and in a rather  
bar covered with an

forest of pines and a  
few ~~few~~ spruce the  
series of T. cyampes sp.  
was taken as well as  
in a rather bare field  
on the hillside. The  
T. fallax species were  
taken all on pine  
covered steep slopes

of the hill at about  
2500 ft - 2 on absolutely  
bare needle strewn  
ground and the rest  
in pine woods undergrowth  
where no grasses grow.  
The single Cohort Oregon  
was taken in the only  
way of wire like grass  
found here. *T. cyamipes*  
sp. was taken alt 2100  
to 2600 ft. *Amphiturus*  
in field above meadow alt  
2200 - 2600 ft. Diet in same  
range the *T. fallax* sp.  
makes quite a clatter  
at times in flight. The  
*Hippisus* & *T. cyamipes* both  
make a distinct loud  
whirr at times esp-  
when taking wing.

---

28. Pasco, Washington  
August 4, 1909.

Collecting carried on in  
sage brush area a short  
distance back from the east  
bank of the Columbia River.  
In ~~most~~<sup>all</sup> places the soil  
was very dry and loose.  
Coryzoe and the various  
species of Trimerotropis  
were found on the bare  
patches between the sage  
brushes. The T. globulata  
type plentiful, Coryzoe  
the most numerous  
species in great numbers  
in sand back from the  
river. The other species of  
Trimerotropis not very  
plentiful, but two  
specimens of the smaller  
species seen. Three

Uedacromerus enigma  
and a few Melanoplus  
<sup>(page)</sup> sp. and Desperatella  
seen and taken on  
sage brush. Three Paropomus  
seen and taken on bush,  
(No. 28) of which specimen  
was preserved. Ues. sp.  
(page sp.) acting very  
much like Ligurotella,  
concealing itself in a  
bush and being very  
hard to capture, also  
alert. Melanoplus  
pachardii group <sup>fairly</sup> plentiful  
Agmatotella pluvialis but  
hard to capture. One  
hatched captured on  
the sage brush.

29 Manantash Ridge 1800-2500  
SW of Ellensburg Wash VIII. 5  
On Plain 1600 ft alt. 1906

1 *Amphibia* 1 *Agavecotilia*  
*Conozoa* w commonest  
*T. punctulata* plentiful  
Very little *Trine* taken  
here - On slopes of  
ridge *Trine* since blue  
leg sp in fair num.  
Above on edge of  
topo among volcanic  
stones with scant  
vegetation *Concotilia*  
plentiful locally.  
*Brunneria* very  
scarce usually taken  
singly & active great  
labor to get series.  
*Dactylid* fairly plentiful  
scattered over upper  
slopes among broad  
leaf plants - They  
jump vigorously  
down well when  
alarmed continuing

leaps for sometimes  
locally on the  
from starting  
point. When they  
hide in some kind  
of vegetation. Antelope  
plentiful on upper  
slopes - & just as  
to take active but  
quick when out is  
attacked at them  
and then spring when  
it has passed -  
A very few M. packed  
found on slopes.  
New Melator found  
on upper slopes and  
plentiful but rather  
well distributed.  
The Melamples minor?  
or tabern. Here a very  
few M. allans were  
on lowest slope

1 *Circotettix rufus*  
seen and taken  
A few *Ampelitermus*  
and 2 *Titanutera* seen  
taken on upper slopes  
also 2 or 3 *Hippus*  
in one corner of upper layer  
of 29

VIII  
30 Stampede King Co. Wash  
2800 ft. *Applodermis* taken  
under stone while clearing  
camp in afternoon - Seemed  
asleep - wouldn't jump - when  
laid on back stayed so -  
Insect taken in fir forest  
when collecting wood also  
sluggish & Hard work in  
forest & brush only revealed  
20 12 *Circotettix* in brush  
and 3 *Campoplex* in  
grass growing in under  
brush a.a. track.

The telegraph operator tells  
me that the Cyphoderr  
come in often at night  
& hop about rooms rather  
actively. I have seen  
about 8 already. These  
are common.

VIII. 6

31. 10<sup>22</sup> 3m Cyphoderris taken  
all in hiding under stones  
on steep slopes of Tringa  
forest. Watching these we  
found that when disturbed  
they would jump, usually  
alighting on their back or  
side and with their legs  
tucked up closely would  
remain motionless. In  
this position their <sup>rubbery parts</sup> ~~which~~  
<sup>underparts</sup> and legs  
resembled perfectly the  
growing shoots of plants  
under the stones and

so their actions must  
be of great service to  
them in eluding their  
enemies. Last evening  
immediately after sunset  
these insects began their  
song - It is a faint  
elusive note repeated  
much like that of  
Sundseria but is much  
less harsh and <sup>7a</sup> much  
higher pitch approaching  
in timbre the song of  
Decanthis - On every  
side this song was heard  
and one insect was  
usually answering  
another not distant  
which made location  
of the sound almost  
impossible owing to its  
elusive quality. They  
said of an ~~affair~~ <sup>of this kind</sup> of fly

Plants grew in spots  
was very plentiful  
and 2 smaller sp. were  
taken - 2 former subrun  
taken very near forest.  
In one patch of wild  
strawberry 19 *Podium*  
was captured - Long &  
diligent search failed  
completely in discovering  
other specimens of  
this species. *Campanula*  
fairly plentiful -

---

34 Centralia Wash. VIII-8  
Rolling hills with fir forest  
and grasses & brakes -  
Ideal appearing but !!  
2 *Criocottia* & *Campanula* -  
Nothing interesting

35 In bull meadows & brakes  
at Newaukum Swamp Wash  
VIII-8 1 *M. furcata* 1 *Xiphidium*

36 East side of Council Crest  
22N 900-1000 ft. Portland  
Oregon. VIII 9 In dense growth  
of bracken and grasses on  
barren slope a series of  
*Chorthippus* & *M. ascanus*?  
was taken not easily. The  
latter was found in very  
small no. except in one  
patch of ground really  
where a series was  
taken. 2 *Circotettix* &  
1 *C. cyanipes* on bare spot.

37 Council Crest alt 900 ft.  
Portland Ore VIII 9 In field  
of dry rough grasses -  
*Chorthippus* the commonest  
plentiful. ~~*X. phidippus*~~  
~~*Chorthippus*~~ rather  
long. several. 2 *M. fuscus*  
seen. one *ascanus*? found  
common along with

(1) *Acantus* native from  
grasses in this field)  
edge of the field near  
the forest. *Camula*  
seen. *Medusa* taken  
among bracken on fir  
clad mountain side.  
Known exactly same  
color as insect. I heard  
producing a sharp  
sik'-sik'-mik'-sik'  
at intervals. Not taken.

---

38 Mt. Labor, Multnomah  
Co. Ore., Alt. 300-400 VIII. 9

The specimens of *Melanoplus*  
taken here were secured in  
a variety of environments  
- in tall grass, in the open,  
under fir and deciduous  
trees on almost bare  
ground and in weedy  
spots. The *Xiphidium*  
was in grassy situations.

39 Clackamas - Co Same name  
Ore VIII. 89 3 M. ascensus?

1 Xiph. Taken - Train halt -  
In high grasses.

---

40 Tupper, Marion Co, Ore -  
VIII. 89 3 M. ascensus? Taken  
in high grasses - Train  
halt. One of these please  
examine carefully.

---

42 West Albany Benton Co Oreg  
VIII. 10. Alt. 300-350 ft. Took

series of *Conozoa* in bare stubble  
field where the species was  
very plentiful 3 m ascensus?  
straw colored taken there also  
Along road *Cammeula*, *Disostea*  
m *pumraut* & spret common -  
On hillside of bare grasses  
w. clumps of hazel and  
scrub oaks - many  
pure stumps m *pumraut* common  
m *attanes* m *attanes* gr small  
found in grasses in fair  
noo the latter fairly local  
1 *Beccant californicus* *Dryophila*  
taken also a number *Becc* -  
Beccant all from hazel  
and scrub oaks *Scyamus*  
fairly common *Arctotia*  
in burnt place at top  
of hill. *Arphna* in stubble  
grass field and low hillside

43 Albany Tine Co Ore VIII. 10  
Decaethus swarmed  
in tall sticky weeds  
with yellow flowers growing  
in dry grassy field where  
only M. fennel sub & Caneen  
were plentiful.

Douglas County. Alt - 800 - ~~822~~ 1000 ft

44 Dunde, Calapooia Mts Ore  
VIII 10 On hillside covered  
with scrub oaks Abundant  
with occasional firs left.  
Scant grasses M. validus?  
v. common - Especially in  
and among <sup>diag.</sup> pine boughs  
and limbs M. altaris com.  
sp. also common M. altaris  
and few mt also found  
Arphea not uncommon  
esp. near station on  
pine bark Three Arphea  
taken also 2 at top of  
hill in fir brush.

*Chorthippus* common  
both on hillside in  
forest & meadow & in  
valley - The commonest  
Many gaudy forms  
noticed. A few *Oecanthus*  
& *Xiphodons* taken from  
dry meadow grasses.  
*M. validus*? is ~~very~~  
active and sings very  
tenaciously

45 Divide Lane Co. Ore VIII 11  
Alt 800 ft In grassy valley  
covered with low clumps  
of oak sprouts In grasses  
*Acrydum* & *Chorthippus*  
all taken also *Aspidias*  
*Melanophus validus*? *Xiphe*  
- *Oecanthus* all taken There  
were were all collected  
before 8 A.M. in the morning  
fog. The single male

*Aglaothorax* was taken  
after dark on the  
night of VIII.10 - It was  
stridulating in bracken  
in the nearby scrub oak  
forest in which we caught.  
It was taken with the aid  
of a flash lamp and was  
the only individual heard  
although we were listening  
intently for them all  
evening - The song  
was - a z ũ ũ ũ ũ a  
z ũ ũ ũ ũ a z ũ ũ ũ ũ a z  
ũ ũ ũ ũ - kept up  
constantly for some time

46

Durde, Lane Co Oregon VIII.11  
Calapooca mts Alt 1400-1600  
ft East from station  
on steep hillside and  
especially near summit.  
*Podiceps polio* taken on

scrub oaks hazel and a  
sort of wild gooseberry -  
seemed to prefer hazel -  
The <sup>insects</sup> rabbits were almost  
identical to *P. glacialis* -  
Almost every specimen  
was found summering  
they on the leaves  
of the bush usually  
about 1/2 way to top  
in summer spots  
they were alert and  
quite wary but seemed  
to be overconfident for  
often they would wait  
just a second too long.

winged *Podisma* the  
scarcest species of all  
the *Melanoph* taken -

The males <sup>270 first</sup> were found  
on the hillside in scant  
vegetation but the majority  
were captured in a grassy

sunney gradual slope  
at the summit? - It  
took the ~~time~~ extremely  
long to find *P. polita*  
but after the exact  
habitat was found the  
series was taken slowly  
but constantly however  
this other host ~~was~~ <sup>was</sup> ~~found~~  
found proved very scarce  
and only persistent  
marching for a long  
time netted the specimens  
*Green Cicadris*? Taken  
in ~~some~~ <sup>almost</sup> meadow-like  
slope about thestles and  
raspberry vines - The *Ps*  
were singing constantly  
a zip zip zip zip zip -  
but the sound was not  
loud and was found to  
be hard to locate.

Up here *Cicadettix*  
was fairly common in  
the open spaces - *Cicadettix*  
*Orthippus* the commonest

but ~~up~~ were *M. validus*  
as well as on the steeper  
slopes was almost equally  
as common - everywhere.

*M. altanus* am. sp. we have  
about decided *M. devastator*  
was <sup>fairly</sup> plentiful also. ~~*M. altanus*~~  
only occasional. A very  
few *Urophila* & *I. yanceipes*  
seen. 2 ♀ *Agrostothorax*

were taken / under bush  
on the slope and the  
other under a bush in the  
almost meadow like  
slope. They crawl and  
hop about clumsily until  
alarmed when they are  
able to spring vigorously.

also 1 *Aerydium* a few *Xiph.*  
& *Acanthus* all summer  
meadow. *Podisma* winged  
♂ & ♀ very active and astute  
quick - always on ground.

47 Drain Douglas Co. Ore  
VIII. 11. *M. devastator*

very abundant on hillside  
of short dry grass - There  
*S. venustum* common -  
*Euura m. attans* *S.*  
*cyaneipes* also - nothing  
striking - In bushes on  
hillside nothing found  
but yellow jacket nest?

48 Mendocino Douglas Co. Ore VIII. 12  
alt. 1500-1900. In forested valley  
of Rogue River mts. A <sup>fairly</sup> ~~heavy~~ <sup>typical</sup>  
growth of tall <sup>deciduous</sup> ~~fir~~ with typical  
forest undergrowth. In the  
small openings in this forest  
two shortwinged melanopli  
were found - One near  
*M. validus*? was taken in  
fair nos. by careful  
search - they were not  
plentiful. The other  
species like the winged

Divide. *Polemia* was scarce  
and both males & ♀s  
were very active. Even in  
the forest both of these  
species were found very  
scarce in the thickest  
undergrowth - In like  
situations, *Aglaothorax* was  
found usually in twigs  
or near a stump and  
not at all difficult  
to take. *Arctostylus* & *S. apicatus*  
occasional on the logging  
road where also a very  
few *S. sumatrensis* were  
found. *Chorthippus*  
was in fair numbers in  
the largest opening in  
the forest (about 50 ft  
across). Two colonies  
of *Oxypterus* were  
found in fir logs and  
all were taken.

They were only found  
in the logs where  
the wood was soggy  
and the bark stripped  
easily - here directly  
under the bark and  
in the burrowings in  
the sap wood the series  
was taken - they eat  
their way through the  
sap wood preferring  
the places where it  
is soggy and decayed.  
On two fir stumps we  
found Manisa - They  
were under the bark  
and in <sup>large</sup> holes of borers  
in the sap wood - They  
were found in the  
slightly decayed  
portions - Between their  
feeding place was  
exposed some wood

~~Unusually small~~

~~remain motionless  
while. Then would  
jump wildly about and  
then, as suddenly, be  
purposely quiet so that  
they were about impossible  
to follow and their coming  
made them completely  
unfathomable on the ground.  
In this way several escaped.~~

49 Siskiyoun, Jackson Co. Ore. VII. 13

In Siskiyoun Mts. At 4100 ft.  
M. swainsoni & S. nevadensis common  
on crushed rocks of R.R. Look  
in series of *Circulites* mottled  
sp. *C. suffusus* (Probably  
*S. fallax*) *S. cyaneus* and  
the common *S. nevadensis*  
*lancei* ? As it was late  
in afternoon *Circulites* were  
scared up and clustered by  
little in their short flights.

alt 4200-5000 in *Trichy*  
*Canadensis* forest - Took  
1 *T. Weibeler*? Several *T.*  
*fallax*, *T. cyaneipes* and  
2 heavy ♀ *Melanoplus*.

Alt 5000-5600 In forest  
of scattered pine & alpine  
hemlock - Typical Canadian  
and Hudsonian mixed  
In alpine undergrowth  
Common *sh* w *Melanoplus*  
cree ~~and~~ <sup>feeding</sup> ~~and~~ <sup>and</sup> ~~operate sh~~  
a w ~~sh~~ ~~cree~~ - very  
plentiful the latter the  
most no. A few *Chortup*  
and several *Glyptocallis*  
The latter near dead  
branches especially and  
most active, 1 *Dectid*  
and under the trees  
on the pine needles  
a number of *Phedusa*  
and a few *abac*

color sh. w. Melanoplus  
sericeus P. T. fallax  
& cyaneipes in fair nos.  
Alt 5600-5800 on treeless  
summit bald of purely  
Hudsonian - T. Kochelii?  
common, small colony  
of a pale Cammula,  
quite a few of 2 common  
sh. w. Melanoplus. T.  
fallax. Several m.  
destruction 2 Chalcids.  
Arthropoda by far the  
most plentiful where  
Hudsonian flora first  
appears at about 5000.

---

50 Mt Shasta. Siskiyou Co. Cal.  
VIII. 14. At timber line 8000 ft.

On plain of volcanic ash  
and pumice covered by a  
scant growth of Hudsonian  
grasses and plants we

found *Bradytriton* plenty  
and although there  
were many nymphs the  
great majority were adult.  
many were found in  
creeks. They make one  
think of toads hopping  
lumberly about with  
their staring appearance.  
The only other species  
to be found here was  
*Bombina orientalis* -  
nymphs were fairly  
numerous but the  
series of adults was  
taken only by close  
and protracted search.  
They are vigorous and  
alert - most were  
found on the small  
areas where only the  
~~grass~~ scant alpine  
grass grew.

— 51 Mt. Shasta Alt 6500

On a volcanic outcrop of  
very rough and broken  
rock a series of *Circotellix*  
was taken - nowhere else  
was this species seen.  
A few small *Microscaphus*  
were taken here also.  
A few *L. fallax* were  
found on the bare  
ground under the  
conifers. C. was clattering  
loudly when we passed  
in the morning but  
3:30 PM. They were  
silent and were  
resting on the face  
of the rocks toward  
the sun. The forest  
from there to <sup>the lake</sup> ~~the lake~~ <sup>the lake</sup>  
was bare of almost all  
undergrowth only *L. fallax* seen

52 Mt. Inasta alt. 5500  
in a grassy spot near  
a stream at a short  
distance from the trail  
*Hippiscus*, *sh. w. Melanophli*  
*J. cyaneipes* *J. Koebeler?* *fallax*  
were found "quite good  
numbers. Quite a  
colony of *Hippiscus* was  
there but they scattered  
all at once and some  
time was needed to  
gather the series. *U.*  
was everywhere in the  
grasses. In some  
low heavy meadows,  
several *Neduba* were  
seen while in a bush  
of which we have put  
a sample a large  
*Anabrus*-like *decoloratus*  
was found. Careful  
search resulted in our  
getting the series.

the *Hypocissus*. Here for  
a long distance where  
they took wing. One  
specimen of *S. addenda*?  
in this lot was taken  
in the chaparral at  
about 4500 ft.

53 ~~S. addenda~~ Siskiyon Co.  
Sisson Cal. VIII. 15 In meadow  
grass near stream 2 sp.  
*Hypocissus* found. Brown  
sp. not common. 1 *Chortippus*  
*M. fumus* in fair nos. *M.*  
*destructor* present. The  
sandy, bare ground in  
chaparral *Conyza* common  
a few *S. addenda* seen. 1.  
*fulva* present. 2 specimens  
of *M. anthracinus* were  
taken on rocks. *S. addenda*  
near Sisson. Long nose  
others seen. *Camula*  
*swarzens* in grass at Sisson

54 Tehama Tehama Co. Cal VIII. 16  
Sh wing melanopleus

plentiful in weedy fields.  
1 Oenanthus 1 ~~Sisymbrium~~  
a few Cammela. T. virid  
in bare spots common.  
M. devastator in small  
moss in wheat stubble.

---

55 Teal Solano Co Cal VIII. 16  
large Sh wing melanopl  
common in marsh.  
3 Taken

---

Marina Co.  
56 Mt. San Rafael Cal. VIII. 17.  
Alt. 800 ft. At upper limit  
of dry oat-like grass on  
hills. M. devastator very  
plentiful a few S. venustum  
Small Sh wing melanopleus  
Taken on green small  
leaf brush near low  
chaparral.

57. Mt. Sannalpas VIII.17

Specimens taken in  
grasses with scattered  
low green chaparral  
at 1100 ft. - two sp. mel.  
sh. w. - *Trimerotropis*  
and *Mopsea* in the  
thick low chaparral  
from 1100 - 1500 ft. The  
former in open spots  
and in the tops of  
bushes - *L. Thalassica*  
has the habit of  
climbing in the top  
twigs - *Mopsea* usually  
taken from mangrove  
very vigorous and  
active.

---

58 Mt. Sannalpas  
VIII.17 Alt. 2586 - 1500  
*L. Thalassica* were found  
in more than

elsewhere also dark  
*T. cyaniceps*. 1 large  
sh w *S. melanops* taken  
in weeds near summit.  
2 *Decatylus* where taken  
by beating from Mangrove  
as also the *Oporeia*  
mostly at about 2400 ft.  
1 *S. crassipes* at 2400 ft.

*S. very* near *Thalassia*  
was very common all  
along R.R. fr 1000 to top  
but only 2 or 3 were taken  
as we didn't visit its  
summit along creek

59 T 5360. San Miguel Hills  
San Francisco Co. Cal. VIII. 19

High gale and fog made  
collecting very difficult.  
*Arphia* species common  
on bare slopes along  
road at 800 ft 3 Sh

w Large *Melanocephalus*  
taken there and a  
few *Truncat* sp. among  
reddish rock fragments  
which color they were.  
In grasses and *Strophop*  
were taken and  
in low green weeds  
or shrubs *San Ph. d.*  
*Melanocephalus* was found  
Below at about 600  
ft in a quarry. The  
series of *Truncat* was  
taken among rock  
fragments. In *Strophop*  
almost everywhere.

Summit of 63 Monterey Co.  
60 T 55 0 Del Monte Cal VIII. 20  
Taken on shore side of sand  
dunes in low scattered bushes  
and grasses - yellow war  
found weed which seems  
to be a common one  
sh w Mel. and *dictid.*

1 ch w. Katydid flew up on  
 low green bush. Very  
 few Conozoa - Microtes  
 common in bare spots.  
 1 Cammula seen - Hesperot  
 sk is common in this section  
 a little less scarce  
 than anywhere else.  
 M. bowditchi? In sage like  
 bushes. Mel. Heavy sk a  
 common in grasses.

---

5590  
 30  
 5720

61 T 5590 Del Norte - In low  
 dry grass & yellow flowered  
 weed 1 D. spicata Swarms  
 are sk w mel many large  
 sk w mel. In grass sk is  
 mel occasional esp in bare  
 spots S. punctum in few not  
 Hesperot sk is scarce.  
 Microtes common in bare  
 spots. Dactylid very common  
 1 Hamulia on ground.

very few Conoza. - Swarms  
Orthoptera.

Det. month 11.10.70  
62T 5905 On top of beach  
dunes 30 ft high covered  
in low bushes and scattered  
grasses - note coloration -  
Back of dunes low coaks and  
grasses on inside of dunes -  
Microtus the most plentiful  
On gray oak on gray  
bushes

Det. month 11.10.70  
63T 5925 Specimens taken in  
Mauzanita and other typical  
Tamalpaan Chaparral - *Urosia*  
just as in Tamalpaan. 1  
Capre beak *Trichostopis* taken  
on woods path - *T. Thalassica*  
in Mauzanita. In gray  
oak wood not common  
taken on grayish bushes.  
1 *M. f. f.* taken in  
chaparral

Specimens of yellow, low gray  
mauve-like & sage-like kept

64T5965 at Del Monte only  
one area of mauve-like  
and breast high chrysanthemum  
was found to the east  
of the town and covering  
several hundred yards  
in every direction.

In the places where  
the short dry grasses  
grew I found *Orthocentrus*  
*swainsonii* - especially  
was this so where yellow  
flower sticks would grow -  
I prepared slight depression  
in the grass <sup>telling the grass</sup>  
from bushes and grasses  
slopes back of the dunes  
revealed especially the *Orthocentrus*  
in the ground gray leaf  
plant & / *Kalypso* in green  
bush. As the sage of  
green most abundant  
there *Orthocentrus* was  
there in more or less

San Luis Obispo, CA: 21

4475465 Paso Robles Hot Sp.

Orthop. not common anywhere

The most plentiful sp. now  
abundant in soil, in low dry  
grass on hillside alt 750-900

*Polocosa* ssp. on flat  
of same grass near town  
a few m. distant and  
*S. communis* in both of  
these localities also. A

scarce yellow wing gray  
*Theridion* in streets  
near town and on bare  
ground. *T. aridulata* 2 seen  
up in hills alt. 900-1100  
to west of town about 1 mile  
in high chaparral growing  
scatteredly on bare ground  
between *Quercus* & *Adelpha*

*T. thalassica?* seen in  
small nos. A black  
wing gray *Theridion*,  
occasional & well distributed

of which a series was  
taken - 2 shy species,  
but always alights on  
bare ground bull-like?  
thalassica? Here also  
1 gorgeous Leprus was  
taken on bare ground  
but no others could be  
discovered. Vermistum here  
also. Notice the great  
variation in the wing-  
band of the scarcer  
gray thimulotropis.

Sla Barbara Co.  
65 T 6040 Santa Barbara Cal.  
3 ~~Bythell~~ taken in grass at  
night - VII. 21

About Santa Barbara in fields  
Only a few viniculata, Vermistum  
2 in 1 place Cammula -  
On hillside from 50 to 350 ft  
where a great tangle grows of  
bushes weeds and reeds.

low grasses. 3 *Decticus*  
Taken these were alert  
and terrific jumpers  
springing from bush  
to bush in long leaps.  
*M. bowditchi* plentiful  
but very shy and  
marvellously quick in  
movements found in  
bushes and also in  
grasses. *Napaia* found  
only in grasses in the  
bush tangle - 2 sh w  
large *Chloroceryle* taken  
here also. *Polioptila* immat  
were adult in one place  
in grass along R.R.  
1 ♀ *gryllus* under stone  
they are noisy and  
keep up a racket  
day and night.  
*D. vire californica*? along  
R.R. on along ground.

T 6100

66 San Luis Obispo VIII. 21

In weedy grass field

(harvested) Shw. Coll. not  
common - *M. devastator*  
seen less so - 10 seen, stop

T 6105

---

67 Montalvo, Ventura Co VIII. 23

Wetland - cultivated land

*uniculata* only - In dry  
sandy river bed 1 mi. fr

town series of ellipses  
taken and a very few  
*Conozoa* seen

---

T 6145

68. San Luis, Los Angeles  
Co., Cal. Alt. 1160 feet.

August 22, 1909. In ~~an~~

areas of brush woods (flowering)  
along the dry wash of the

River collecting was  
carried on for several hours  
In the bushes of this particular  
plant Desperotettix was numerous,  
while ~~the~~ Melanoplus bowditchi

grass was scarce and  
hard to take in some of the  
surroundings. Mel. devastat<sup>atn</sup>  
was common in tall dry

oat-like grass, while Oedal-  
corotus was common in  
a sort of low sweet-smelling  
tanned, occasionally flying  
into a tall white sage for

refuge Herotimnea

sansoneana occurred  
in the tanned weed in low  
oat-like grass, while Longia

was seen but once and  
then in much the same  
surroundings as *Herotima*  
*Polvosa* was not common  
in the out-line grass  
due to being beaten from  
bush

T 6235

spec 25-

1 B. Bakerfield, Kern  
Co., California. August  
20, 1909. Elev. 415 feet.

Collecting was done in a  
tract of scattered bushes  
on a plant of which a  
sample was taken and  
which averaged three feet  
in height. The bushes were  
placed much as Covillea  
is placed and the patches  
of bare packed dry aside  
between varied in size.  
In the bushes Melanophus  
and Urolophus occurred,  
Stigmomantus and Pitau-  
cutra also being swept off  
of it. Both species of Drum-  
etropis, The Agavecotettix  
and the Frepidulus  
occurred in the bare patches.  
The last the commonest  
all very agile - hard to  
capture

# Los Angeles Co.

69 T 6235 Verdugo V Hills Cal.  
VIII-23 Alt. 750-900 ft

Specimens taken on arid  
hillside covered by great  
high chaparral. A very  
few *Sesuvium* seen. 3 *Moraea*  
taken in bushes. *Salpiglossis*  
not plentiful. *S. Michauxii*;  
a few seen. 2 sp. of *Urtica* &  
found. Both very common  
*Calligonum microcarpum*?  
common in bushes but  
most alert and shy.  
Thus the most plentiful of the  
*Sacchara* on hillside in fair  
nos. *S. arvensis* in common  
not common. *S. vinosa* & *M.*  
*decastator* only sp. seen in  
fields at foot of hills.

VIII-23 Los Angeles Co.

70 T 6275 Inojaco Cal. Alt.  
434 ft. *Conocarpus* in fair nos  
in sandy field. 1 *Shrub*

*M. decastylus* & *M. cinereus* also  
present in dry weed field  
growing nearly plentiful

Los Angeles Co-  
71 T 6290 Roscoe, Laguna W. Ark  
VIII. 23 Alt. 825 ft. On dry  
sand in wash *I. californica*  
scattered not common.

In short dry grasses  
*I. albolineata* very local  
and only found in two  
small spots. *Psilocera*  
very plentiful. The most com.  
*M. cinereus*? Common in  
bushes but most wary.  
1 Dactylid beaten from green  
bush and a very few  
*Hesperobittes* found there.  
In another bush with  
dry pink white flowers  
*Procyon* ~~brilliant~~ *Procyon*  
seemed not uncommon  
found also in another  
found there also.

*Arthropoda* local common in  
low dry grasses and scrub  
background - On this well  
covered in scattered desert  
bushes, prickly pear and  
cactus plants. Arthropods were  
very disappointingly scarce.  
A more ideal appearing habitat  
could not have been imagined.

72 T 6360 *Cinnab. Cal. IX 1*  
*San Bernardino Co.*  
Train stop beside R.R.  
*Agaveotiller* *Deschmura*  
very plentiful in desert  
scrub beside R.R.  
*I cincta* not uncommon.  
Smallest *I cincta* taken  
at Teasdale Cal. IX 1

*San Bernardino Co.*

73 T 6370 *Lyons Cal. IX 1* Taken  
on greasewood slopes with  
volcanic fragments.  
*Agaveotiller* very common  
on greasewood *Boottia* common

on same bush 1 Hormelia

{ On desert bush some  
greyish low round. 1 2

Dactyloctenium, Dactyloctenium <sup>common</sup> 1

Parabaccharis - In fragrant  
volcanic quite a few

Syllholia plumosa found

single and well leaved

Hellipteris indica not

uncommon. Parasponia

in bunches of high grass

H. minimum scarce in sand

at foot of hill. In sand also

L. maculata & L. cincta

1 Stachys caught flying

across desert vigorously.

Cupressus on foothills in

volcanic fragments.

Alt: 2800 - 3000 ft.

~~Stachys~~ 1 Stachys

~~T 6460~~ taken on grassy

plain Long Melanophloeus

on greasewood 2.

74T 6465 Lyons Cal. In sandy  
area of sparse dry weeds,  
and grasses - H. minimum  
fairly plentiful very local  
M. longop. on green  
weeds occasional. T.  
cincta not very plentiful  
Parapomala occasional  
in grasses. Boottellia  
in bordering greasewood  
bushes. 1 Dryllus  
from cracks in P.M.

75T 6550 Lincoln Co. Nev.  
near Lyons Cal. In foothills  
bordering into McCullough's  
Range. IX 1. Alt. 3000-3500 ft.  
High up on bare volcanic  
fragments T. cyaneus  
found in small colony  
on slopes Arphia and  
Tuffetia occasional but  
3 humat litaneutria

Parapomala in grasses  
on hillside - seen  
bushes of steep arroyos -  
Pococotellus in greasewood  
open brush - Very shy  
very scarce very vigorous  
The Melanophus found  
in green brushwood in  
same location in fair  
nos - Almost the last  
specimen of P. raven  
seen taken and the  
most powerful jumper  
killing in the bush, and  
then springing far  
out over the bushes it  
was most difficult to  
take. Thomomys and  
Pococotellus fairly common  
in greasewood. /  
was at outlet at top  
under stone - Pococotellus  
much alt 3500 3700 ft.

Las Vegas IX 1 09

76T6585 *Tryblus* spp. 7  
4 sp. taken at lights  
also 1 *Conozoa* 1 *T. vine*  
1 *Stagnomantis* 1 *Arphokilla*  
*Tryblus* very fairly  
common on wall  
on which light was  
burning - All others  
taken in same location

---

T 6620

T 6630

Specimen 9

No. 2 B. Écho Mountain  
San Jacinto Mts., Los  
Angeles Co., Cal. Elev.

<sup>2250</sup> 2250 - 3200 feet August 24, '09  
The single Normilia was  
taken near the greatest  
elevation and was beaten  
from brush <sup>(sample taken)</sup> near the greatest  
elevation - no others seen.

The Melanopterus was taken  
at about 2500 feet. The  
Lactista frequented bare  
spot all the way down.  
Murea on bush, same sp.  
as Normilia.

T 6710

Spec. 82.

No 3 B. Strawberry Valley San  
Jacinto Mts., Riverside Co., Cal.  
Elev 5400 - 5500 feet Aug. 26, '09

Trimacrotropis common  
everywhere in numerous  
color phases, two radically  
different types being often

taken in the same environ-  
ment, some specimens  
however, as the speckled indigo-  
beards being wonderfully  
protected when in the grassy  
areas. The two species of  
Malanoptus numerous but  
hard to capture, found on  
bare gravelly areas between  
patches of low plants, on or  
near dead logs and  
fragments of decaying wood  
and in the low plant growth.  
But no Umpetormes and  
no Pitaneutrea seen, the  
latter running through <sup>dead</sup> leaves  
one single hatched was  
jumping among dead oak  
leaves and pine needles.  
All collecting done under  
or in pines and open  
spaces between the pines  
and oaks. Umpetormes only  
on mangrove - some taken.



~~Hornilia~~ on ground in  
same place - 1 ♀ *Lilant*  
in alkali grasses.

*Tripidulus* not uncommon  
on dry earth between  
desert bush. *Hesperotettix*  
common in green brush.  
1 *M. jarrovi*? taken on  
stone wall of station.  
1 *Quaethus vivax* swept  
from alkali grass <sup>marks</sup>

---

Las Vegas N.M.  
78T 6875 In green weeds about  
3 ft high on edge of large *Hesperot*  
very plentiful *M. flavidus* common  
*M. jarrovi*? very scarce, *M. allan*,  
*vivax* *Stagnom.* - On bare  
white alkali flat with very  
low scattered desert bush -  
*Tripidulus* very common  
*Acrotylus* also. *Trimerotropis*  
scanty and plentiful scattered.  
• Males made a light

more with their wings  
in flight 24.  
*maculata* seen. *Anomia*  
common in widely  
scattered colonies. The  
*Epia* *Cephalota*. [*Eumetop*  
very abundant in desert  
bush in a few localities]  
were taken in alvati grass  
along a stream as this & the  
- *Epia* were constantly  
stridulating - a faint  
high note. *Coryza* in  
dry waste field. These  
were all taken about the  
edge of the town.

79T6995 Las Vegas Nev IX 2

In route excellent weeds  
near river - M. yarrowi?  
series taken by careful looking  
they are shy and often  
found inaccessible places  
to hide S. chockone common  
here. S. venusta one taken.  
M. flavescens here not common  
Apera conozoa plentiful 2  
Oenanthus beak fr. weeds.

Lincoln Co. alt 4400

80T7060 Caliente Nev IX 3

In meadows of high green  
plants (Opuntia kept) a  
small series of Hesperotillia  
taken by long hand work  
M. bowditchi? common in  
same place. Conozoa common  
on ground - Silene  
+ Gomphila beaten from  
Hesperotillia bush Oenanthus  
also M. fennel subreum

only up in marsh grass

alt. 4400-5200-

81T 7110 Caliente Nev. On  
mountain side covered with  
a scattering growth of sage  
and desert bushes. M.

showing the most plentiful  
and also the largest of  
pumpkin anemones and  
growing deep in the bushes.

*Geophila* found in  
smaller flowering bushes.

Also *Imbricaria*? in  
this locality in fair  
nos. A few *Truncatella*

1 colony of *Cyanus*

found on bare place  
in canyon side. *Syrphus*

Here also - 1 *Periphrasa*

1 *Parasphincta* Taken

in dry grasses. *Meropa*

found on *Onitis* and  
in a bunch of grass  
and another bush  
(both specimens kept)  
*Agrostis* common  
on bare ground among  
bushes — Collecting slow.

82 T7180 In bare wash on  
edge of Caliche near 18.3. The  
*Onitis* and *Helianthus*  
were found — some others  
could be found. *Onitis*  
like all others were taken  
including *Sedum* *Alvina*  
and the rest except *Onitis*  
except from *Helianthus*  
which like the *Onitis*. All  
Yucca found only in one  
colony at foot of  
slope. Alt 4400 - 4600  
*Helianthus* *Alvina*  
*Helianthus*

(5971 RPS)

alt 6000 ft Co. <sup>Quilley</sup>

83T 7210 Crestline new. IX 4

Collected in scattered forest

of Utah juniper and occasional  
piñon (*Juniperus utahensis*)

The two green scutellids were  
taken in this juniper - Both  
were located on the night  
of IX 3 and one was taken  
by aid of a flash light  
up 2.5 ft in the top

middle clusters of a  
juniper - Its note was  
much like *Scutellera*  
~~and~~ but was more  
difficult to locate.

When found the  
insect started to  
crawl down the  
branch slowly and  
I was unable to  
seize it until it had  
gone down the trunk  
over a foot. The other

was located in a  
juniper about ten  
ft high and the next  
morning was found  
resting in one of the  
topmost bunches of  
needles where its  
coloration made it  
almost undisturbed  
to surroundings.  
When seized it  
uttered a sharp twick  
twick twick over  
and again - The  
song at night could  
be heard by intent  
listening at about  
two hundred feet.  
Two others were heard.  
They began song  
as dusk fell and  
were loudest early  
in the morning  
as the night came on.

coyotero

1 Another taken in  
a bunch of <sup>sage</sup> grass  
in the juniper forest  
where there was  
nearly any other  
vegetation. 1 *Strapulus*  
taken in about the same  
situation. The small  
skewers were not  
uncommon in the sage  
flats in sage bushes  
the small skewer  
was very scarce indeed  
the few taken were with  
feathered and found  
where the low yellow  
flowers and sage  
grew. *Cordilleris*  
was taken in a bare  
place at the end  
of one of the juniper  
covered ridges. The  
blue by *trimacrotis*

was found in a small  
colony in this spot.  
It was seen nowhere else.  
The red leg Tamarotops  
was found on the  
bare ground of the  
juniper covered mts.  
especially at the lower  
levels. The blue wing  
Sagittarius was  
the same but more  
common at the higher  
levels. There also in  
a species of greasewood  
(San Clemente) there was  
found quite numerous.  
A bluebird on ground  
among yellow flowered  
bushes. Ammitus in  
pines forest near beach  
near. Perotomera was  
found on the ground  
near the beach.

plant. Agrostoides not  
uncommon - here and  
occasional on sage flats.  
Hesperostyles also taken  
on yellow flower beach -  
T 7325

84 Milford Beaver Co Utah IX. 5  
alt. 4900-5000 ft. at the  
lowest along the Beaver  
River in salt alkaline

short grasses. Festuca  
breviflora was predominant  
& very common - In the  
wetter higher marsh  
grasses the former subum  
was predominant & equally  
plentiful. There Xiphium  
was likewise very abundant.  
Opuntia common in short  
grasses & Agrostoides also  
a series of Ranunc. growing  
taken here also but local  
[Orphulidella not plentiful]

near the river. In beating  
3 sp. Tettigids were taken  
one of Tettigidea [punctata  
in June. - a very slow  
looking one. D. carolinensis  
common along R.R.  
The aculeatus & melano  
taken in salt bush near  
the grasses. Deropium  
near town on desert  
heavily bristled. Chond.  
Pattania in short grass  
on low ditch near marsh  
Hesperotettix yellow flower  
bush. Eulocara very  
common in short grass.  
S. bilobata along edge  
of desert. Nowhere common  
but well distributed.  
Bilobata often makes  
quite a lot for me  
small a sp. - like Eucrypt

85 Milford IX. 5 ~~1. latimista~~

An ridge covered by sage  
only at 5000 ft. 1 Arphia  
which made an extremely  
loud clatter as it flew -  
A very few greenish lig  
sp. Trimerot were found  
singly in areas where  
sage was <sup>scant</sup> ~~very~~ low  
and the ground was  
bare. A very scarce sp.  
1 Mectops taken were also.  
A few Carlinianus were  
taken were also. 2.  
latimista a good sized  
colony found on quite  
bare slope near edge  
of town where yellow  
flowered bush was  
predominant. The  
closely allied species  
was less abundant  
in any one spot but

was everywhere found  
especially in yellow  
flowered bush areas.  
*G. bilobata* the same  
but less abundant  
widely distr. but usually  
found in pairs or singly.  
*M. bonditchii* grass was  
not uncommon in  
sage esp. where sage  
grew occasional in  
yellow fl. bush areas.  
*Arctostaphylos* in sage and  
salt bush - the latter  
usually very scarce  
and hard to take.  
*Ceanothus* only on edge  
of town on bare gr.  
in waste field only.  
There not uncommon  
1 *Hesperis* taken in  
yellow flowered bush.  
*Artemisia* occasional in

1 *T. caeruleum* Taken  
in sage covered  
situation. *T. lativitta*  
locally and similar sp.  
general most common.  
*M. bowditchi* sp. the about  
same as the latter.

$$T 7630 + 145 = 7775$$

Quab Co alt 5839

87 Lentic Utah IX-6 a few  
*H. gillettei* taken from  
yellow flower heads with  
great difficulty. 1 *Acanthus*  
also. *T. gracilis* found  
in small colonies on  
bare earth in sage  
flats - not common  
and very local. *T.*  
*cyanipes* sp. local but  
fairly common when  
found on higher  
ground where junipers  
grew and sage.

1 *T. caeruleum* Taken  
in sage covered  
situation. *T. latum*  
locally and *minibae* sp.  
general most common.  
*M. bowditchi* sp. the same  
same as the latter.

$$77630 + 145 = 7775$$

Just Co alt 5839

87 Little Utah 18-6 A few  
*H. gillettei* taken from  
yellow flower heads with  
great difficulty. 1 *Acanthus*  
also. *T. gracilis* found  
in small colonies on  
bare earth in sage  
flats - not common  
and very local. *T.*  
*chanipes* sp. local but  
fairly common. When  
found on higher  
ground where juniper  
grew and sage.

yellow flower plant  
were occasional.  
*J. oviculata* near  
station & *capitata*  
among stones on  
bare slope. *Cordillaria*  
occasional on almost  
bare ground usually  
where sage bushes  
grew - well distributed.  
*M. bowditchii* <sup>very</sup> common  
everywhere among  
sage. & *Pseudosaxifraga*  
taken on bare ground  
in sage flats. *Quercus*  
fairly common and  
well distributed.  
*J. cyaneus* not  
common among  
shrubs on bare  
ground. - The country  
was rolling the low  
ridges covered with a

J. gracilis made a distinct tick tick tick  
as it flew up - J. cyaneus & cyanipennis  
a loud whirring the latter almost like a whirring  
scattering growth of  
junipers and a very  
little undergrowth - mostly  
the yellow flower plant  
occasional sage and  
an greasewood - The  
depressions were pure  
sage with bare  
ground - certain areas  
were mostly the yellow  
flower bush - All  
the collected flowers  
were taken from the  
yellow fl. bush where  
it grew among sage

$$77775 + 205 = 7980$$

Alt. 2026 ft.

88 Las Vegas New. 18.2

These were captured at  
lights about the station -  
Microgylus alone was  
taken from grass along  
road at night when

It was shrilly trilling  
of a much higher  
pitch than *Myiarchus* sp.  
 $T 7980 + 10 = T 7990$

### Salt Lake County

89 Salt Lake City alt. 4500 ft.

IX-7 Collected on rather  
bare plain except for  
a growth of very short  
green weed - *Artemisia*  
found in <sup>many places</sup> also  
and near Salt Lake  
foothills. *Sal. packardii*  
common in woods.  
A very few *Sal. leucodermis*  
at same location  
while *Sal. allardii* was  
in great num. *Helianthus*  
beaten down yellow  
by frost. *Artemisia* which  
was common. A  
few *Yucca filamentosa* taken  
there also. *Y. latifolia*

only seen & Taken on  
plain. *S. virens* on  
lowest slopes of hills  
1 *Culocara* on bare  
plain - also 1 *Abeutellus*  
*S. cyaneipes* common  
locally on edge of  
plain and on bare  
spots in lower foothills  
*Aeneolettus* scarce in  
same places.

$$77990 + 75 = 8065$$

---

90 S.S.S. XI-7 Alt 5000-6500 ft on  
Maple Peak, Wasatch Mountains.

Alt 6000-6500 in <sup>low</sup> mountain  
herbage. *Dictyocids* were taken.  
They were found most numerous  
near the summit. At the  
summit *Hippiscus* and  
several *Chamaeleus* were  
taken. In <sup>low</sup> mountain  
herbage near the summit

The *H. pratensis* & were  
taken - some others  
could be found. The &  
were taken near a count  
grass. Went up at about 5000.  
The festucae are yellow flower  
such wherever it grew -  
not abundant. *M.*  
*luridus* & *m. altavus*  
veritably in swarms. The  
former the most plentiful  
at the higher elevations.  
*Phacelodes* found from  
5500-6000 in scrub oak  
and sage - very scarce -  
*Asplia* common all  
over mtn. *L. laticincta*  
only occasional but all  
over mtn. *Lincolnia*  
were found all above  
6000 ft - frequenting the  
steep slopes and bare  
spots - they were not

in great ones nor yet scarce  
made a great chatter,  
often remaining in  
the air a long time  
and keeping up a  
doud jerky chatter.  
I noticed that each  
time the other noise  
was accentuated the  
force of the wing  
beats. Thus the  
insect back giving  
it apparently a  
jerky hovering flight.  
It was equally loud.  
Sage W. not at all  
common on sage above  
5300 ft. Antlocara in the  
more bare spots - fewer  
at summit. S. aurata  
a few found in the sage  
scrub of the canon at  
about 5500 ft.

T 8065 + 115 = 8180.

Mesa Co.

91 Grand Jc. Colo. IX. 8 - mesa  
bet Grand & Humison Rivers  
alt <sup>4700 ft</sup> 4800 ft. Ground bare  
covered with a scattered  
growth of *Chenopodium* and  
occasional very scant  
grasses - Other plants very  
rare - *S. stigma* <sup>red leg</sup> common  
and almost everywhere  
on lower portion of mesa  
a few *S. vine* there also  
and 2 *S. laticincta* - Here  
we took 1 *Carthagenus* and  
4 *A. quodopodii* - The latter  
were carefully searched  
but were found to be  
very scarce on this mesa  
*Perithous* not uncommon  
in small colonies 1 *S. laticincta*  
occasional *Agave* little  
were found there. *Callispermum*

Hesper. viridis taken in  
small clump of yellow fl.  
plants. 1 *S. inconspicua*  
found on boulder strewn  
mesa side in <sup>very</sup> scant  
herbage. A series of  
sage brush etc. was taken  
on sage on the bank of  
the Gunnison and the  
few *Sulcigonus* were taken  
there also. Alt. 4585 ft.  
*S. venusta* in <sup>very</sup> low green  
weed in one place on  
mesa.

$$T 8180 + 105 = 8285$$

---

92 Grand Jc. Colo. 1X.8 In  
muddy flats along the  
Grand river. A colony of  
*Encyrtolophus* found in  
one very small spot of  
short grass but two were  
taken elsewhere in April

of careful search.

*Orphulella* in same place - 1 *Stagmom* Taken on green weeds - In these m. different m. fewer common m. *brillatius* occasional. 2 *T. red leg* on bare mud flats and a very few *subifera*. 1 *Hesp.* on yellow bush.

*Derot.* on mud flat.

Except in one small spot of only a few sq ft collecting here as elsewhere at this stop could hardly have been said to be productive.

$$78285 + 55 = 8340$$

Barfield C.

93 Glenwood Springs Colo. 1899  
Iron mtn. Alt. 5800-7100 ft.

Specimens collected in  
grass and weedy field  
at foot of mtn. on slopes  
covered w. juniper and  
some pinon - bare ground  
while higher there were  
grasses & herbs in spots  
under the trees and at  
the top open spots  
with more of the low  
vegetation and a little  
sage. C. suffusus was  
occasional on mountain  
where the ground was  
bare, quite often they  
would fly up into the  
junipers when disturbed.  
C. undulatus was  
scarce up to 6000 ft  
but above that it  
was abundant and

in the open spots on  
the summit it  
was very plentiful &  
kept up an incessant  
whirring and crackling  
quite different from  
the sharp clatter of  
C. suffusus - T. canaliculatus  
was plentiful from  
2000 to 6800 ft - on the  
bare slopes under  
the junipers it also  
made quite a clatter  
when it flew up. - T.  
cinerea was very abundant  
and whirled as it flew  
up - It was most  
abundant toward the  
top of the mtn. T. unconfusa?  
was only found over  
a small area on the  
bare slopes not above  
6200 ft. It was locally

in scattered colonies.  
Erpica was in great  
numbers from top to  
bottom - wings orange  
very few, red mainly.  
M. altitudinum found  
scattered in herbs patches  
under junipers from  
6500 to summit - not  
plentiful. Attaea  
common all over sub  
Sage brush etc. found but  
scarce in sage at top.  
M. flabellum found common  
locally at top about sage  
but some were also taken  
in low herbage a distance  
from sage. Scudderia  
taken in low herbage  
under junipers. Tutca  
found in open spots  
in scrub herbage near  
summit. Scarce

A. arcta? Taken at 6000 ft -  
same in this place -

Acanthulus in same  
situation but in

fair nos. Acanthulus  
very scarce. Dactylus

Taken in bunch of grass  
under junipers at 6000 ft  
1 Shistocerca Taken at  
summit of mountain.

$$T 8340 + 362 = 8700$$

94 Blue wood Sp. IX. 9

On South side of river.

1 T. gracilis Taken on sage  
flat. 1 Deroceras

repens in weedy field

1 H. gillettei on yellow  
flower bush on mountain  
slope. Sagebrush in

not uncommon in  
sage. 1 P. coloratus  
Taken from sage on  
summit of Mt. ridge  
at 6100 ft. 1 T. canaliculatus

Taken on red soil ridge see  
protective coloration.

~~Brown Acanythrus and  
green sp. w. yellow spot on  
head were collected by  
hand beating of scrub  
oaks on lower slopes  
They were very hard to  
get - 1 Geo. quadrip.  
Taken from weeds on  
river flat - The latter  
song is shriller and  
more high pitched than  
the other 2 sps. - Their  
song is quick and of  
a less high pitch.~~

$T 8700 + 50 = 8750$

Sake Co.

75 Summer Pass Colo. IX-10

Alt. 10240 ft. On side of

hill of short matted

grass and sage - C.

subsp. communis

Amundulater occasional  
Corypha only 4 seen  
near foot of hill. In  
gully whose bottom  
was filled with  
small pieces and  
the interstices were  
carpeted with heavy  
grasses we found  
Podiceps not common  
A very hard and  
prolonged searching  
was needed to get  
the seeds. Chorthippus  
here also but not  
common. Camula  
was very plentiful  
on the side hill.  
In nearby meadows  
and slopes we  
found no orthoptera  
or water.

$$T 8750 + 80 = 8830$$

Otero Co.

96 La Junta Colo. IX. 11  
alt. 4045 ft. on bed

of Arkansas River on  
areas of dry ground  
with short grasses  
and most of the  
land covered by a  
dense growth of heavy  
weeds wild sunflowers  
etc.

M. foedus common in  
high weeds - M. glaucifolius

not uncommon locally  
on edge of high weeds

M. latissimus everywhere

M. regalis in fair num

in weeds M. plumosus

common same places

M. britteni occasional

there M. differentialis in

sunflowers along road

Barbarea plentiful

on bare places. Mutobry

also common there

Erythra occasional  
Erythrula v. scarce  
taken on river bank  
I. v. common also at  
light P.M. Acropterus  
occasional in ballast  
weed, 1 q' Photoliot swept  
from same. I. citrina  
common locally very  
gregarious and the  
most any of I have  
seen this trip. - I. latic  
scarce I. monticola  
more so. Spharagmus  
very local (not uncommon  
all of these in the open  
spaces where there was  
hardly any vegetation.  
M. laticornis makes strong  
pronouncements as if attempt  
to fly with its aborted wings  
when captured. They  
are very vigorous.

Antlocara scarce & local  
in bare spots. M.  
laticornis the most com-  
mon species everywhere 76497  
etc in high grass woods  
along road where M.  
plumbeus was equally  
common.

$$T 8830 + 160 = 8990$$

membranes & gizzards  
Taken out tonight at  
La Junta attracted  
to light

T

Specimens from last  
Pueblo & La Junta

$$T 8990 + 10 = 9000$$

Pueblo Co.



97 La Junta, Colo. IX. 11 air 41.50  
Edge of Mr. plains plateau  
on broken up limestone ground  
covered w. ref yellow flowers  
bushy then ~~herbaceous~~ ~~grasses~~  
sparsely. T. longipes every  
where & there on hillsides -  
Series taken only by long  
and narrow wings. Sp. is  
not dry but flies up  
constantly. After some  
time to get on wing and  
is easily taken as it flutters  
up. Has a <sup>with</sup> clicking note  
as it flies up - They often  
fly forward in close  
and flown themselves  
to one side as net is app. &  
only 3 seen taken near  
dry stream where wept  
was a little less scarce  
Arctia occasional on  
hillsides well distributed

Uromyces vel distrikt  
conclusus normal ves

→ Uromyces occ. Two  
on Uromyces flus up the  
quite a while before reay  
another. Hadrotell scarce  
on plain itself. T. brun  
down near dry water  
courses also scarce. T.  
latruncata not uncomm

Usually on hillside  
not particularly local  
M. regular scarce. Thach  
taken under a yellow flower  
long wing Chaetachiot only  
seen. M. conspurcus common  
well distributed Crabulium  
taken in high grass in  
valley below. Braut

○ Pectinid found on  
ground with stridulating  
in high grazed agony  
agony agony on top of

very low plants. Other  
Dactylic on yellow fl  
bush - would drop and  
hide in roots, often almost  
under ground but not  
extremely active. Campyla  
common in swamps  
etc along dry streams  
elsewhere occasional.  
Mestob common about  
everywhere M. platina  
not common but along  
hillsides M. labialis  
common but not as  
c as in valley bottom  
M. glaucus common  
M. like the last word  
leg very rare. Ulloca  
common esp on plain  
in bare places Agrostis  
scarce. Neerupia well  
distrib not common  
Phibost in grassy

spots not common  
Dierneya on dry  
stream wash not very  
plentiful ~~Adiantum~~ very  
scarce in yellow fl bush  
Aster scarce. Titmouse  
found up in yell flower bush  
Vincul common  
Hesper occasional on hillside  
T 9000 + 325 = 9325

### Hamilton Co.

98 Syracuse Kan. 18-12 Alt. 3250 ft.  
collected on short grass prairie -  
most profitable where there  
were lower spots where  
grew sunflowers other tall  
weeds bordered by quite  
dense but grassy. In  
these places and the low  
weeds Diapheromera was  
found very common but  
quite local. Stagmomantis  
not uncommon here also

more widely distributed.  
2 Tritantaria in grasses  
on edge, Xyle in fair  
nos there. rust. Kiowa  
very common on prairie.  
M. laticornis & M. fumer  
very common in heavier  
vegetation - diff & brutt  
occasional there. M. regalis  
very common on prairie  
~~near~~ edge of heavier  
growth. A small colony  
of Hippocampus found here.  
1 Brachyptola taken on  
edge of woods - Arphia  
There in fair numbers  
Dumetia on dry  
bare area. H. speciosa  
among sunflowers -  
they were usually  
found on the stalks  
several feet from  
the ground and

were by no means  
common - Eucyrtol  
occasional - scarce - In  
weedy places, Syrbula  
occasional in <sup>high</sup> woods  
& dactyloctenium taken on  
edge of woods. M.  
fulvum, packardii scarce  
in woods - Amocara  
very occasional on  
prairie - Hadrotett ditto  
D. longipennis scarce on  
open prairie - I. laticincta  
occasional there. Philibot  
there fairly common Lemist  
not scarce - Abutilus scarce  
in grasses on edge of heavy  
vegetation - Opica on prairie  
fairly common. Gryllus  
in woods. Campylacanth  
common in high grass  
woods and difflorens  
Stigater taken in thick grass.

$$T \ 9325 + 275 = 9600$$

Ford Co.

99 Dodge City Ks. IX-13

Collected on wet grass  
prairie - In more grassy  
spots orth. was plentiful  
in bunches *Campyl*  
very common *Urochloa*  
*prostrata* scarce  
*Protachne* common  
around these in  
short grass 2 sp. of  
*Euphyllia* very common  
*M. altavus* 2 sp.  
common on prairie  
also *Orthocentrus*  
*Agrostis* fairly common  
*M. negalis* the same  
small *M. like negalis*  
green very scarce -  
in damp short grass  
*Thymus* there very  
plentiful *Andropogon*

very little can be said  
as everything was  
so wet that it was  
mostly guesswork in  
regard to common  
species. <sup>note blue veg</sup>  
<sup>m. purpureum</sup>

$$T 9600 + 345 = 9945$$

100 <sup>Belphe</sup> ~~Leaves~~ Re, 18. 13

✓ *Chrysanthemum* *taberna*  
stuidy (tiny) high  
on the tassels of

corn - not a chance  
to find in main grass

$$T 9945 + 20 = 9965$$

total collection of  
this 10000 specimens

Stafford Co

101 St. John's Lane Spec  
collected on short  
grass (grain etc)  
with others

$$T 9965 + 20 = 9985$$

Total 10000.

Emporia Lyons Co. Kans.  
/ Consolidated.

# Monroe Co

1 Long Key Fla. 111. 13

*Anisomorpha* 1 beating

2 under coquina boulder on  
the boulder *Cyrtorhiza*  
beaten from the dense Key  
scrub. *Lophophanes* & *Hapithus*  
quadr. beaten from Ilex.

3 *Intia* Taken from under  
dead cocoa palm fronds

on ground. Few *Arphid*

in scant salt on grasses  
*Amblytropidia* in grassy tangle

along scrub *Eptenopides*  
scarce in same place *P.*

*paratyrids* the commonest  
there a few also along  
beach in beach vegetation  
very active. *S. americana*  
in latter location principally

*Forficulid* sp. Found  
in the cocoa palms at  
the base of the fronds

where these are most  
after the dead ones  
have been taken off -  
The majority were taken  
from prostrate trees &  
the most were found on  
a tree which was nearly  
dead - 1 ♀ was found  
guarding her eggs - she  
attempted to carry them  
off in her mouth  
They were often near  
nests of a small stocky  
red ant inhabiting the  
same place. Colonies of  
very young were also  
discovered. They were  
found in about 1/2 the  
places examined -  
1 m. *Myrmica* and the  
strange very dark  
ones were taken from  
under the bark of dead

cocoanut palm stumps  
The Anisotaxis were  
all taken from the  
mounds of dead cocoa  
palms which had been  
saturated by salt water  
& were thoroughly decayed  
The C. diaphana immat  
was taken from the loose  
fibres near the head  
of a standing spade  
The Ischnoptera? immat  
and Eurycolis were found  
on some C. palms as  
the Ischnoptera sp. but  
in the dryer portion  
of the fibres - 2 adults  
escaped. 2. Pycnoscelus  
were taken in same place  
& 1 Lipopterus found dead  
Nylodes adult taken  
from cracks in house at  
dark - all over the

Long Key Camp. There  
were many and almost  
at dusk especially &  
almost all in cracks  
between boards. Specimens  
of *Stix* kept. 20 adults  
& 2 m. *Forficulidae* sp. taken  
All sp. seen taken 0+110

### Monroe Co.

2 Key Yaca Fla. 111.14

*Aptenops* occasional in  
marshy spots *Quikbytop*  
locally not scarce in tufts  
of a kind of vine grass &  
salt marsh grass, a few  
*Orthocentrus* there. *Encyrtid*  
not uncommon on cleared  
coquina where sweet green  
moss was sprouting up  
*Parotoides* occasional  
in cleared jungle growth  
1 *Colony* *Hydrobia* under  
board - snail was escaped

Schists occasional  
everywhere. A few  
Lophopus on green bushes  
and Cyrtoph. beaten  
from mangroves in  
the swamps. Their high  
faint bluish could  
there be constantly heard.  
This Key has more spots  
where there are rank  
grasses than Long Key.  
No bean palms.

$$110 + 55 = 165$$

### Notes to

3. Boat Key Fla. 11. 16 W of  
Key Vaca. Key small -  
openings in scrub jungle  
filled with high grasses -  
all specimens taken there  
note color of plumage  
on blushed mostly is a green  
S. american. The next common  
165 + 20 = 185

## Mourne Co.

4 Key West Fla. - 11/15.

Notes of last trip agree  
except - A mantis &  
crickets taken under boards  
also on what Dutra & Paurinan  
also a large colony of E. f. (bird)  
was found - only 3 or 4 seen all  
not adult. I noticed that  
they squirt out the stinking  
fluid when disturbed &  
trying to escape. It  
is a white liquid which  
squirts out of their tails.  
All the beating which we  
the large series of Cyrtop  
& Tiphopler & also several  
Hepithes & 1/2 grown Stagnone  
revealed but 1 ad 1 m. Plectop  
poeyi - There were on 2, cassia  
as were present all rest -  
etc. Cyrtot a few of  
which were taken over  
mangrove & other.

brushes w shiny leaves  
Both *Uttergids* were  
taken eating bushes -  
The adult from the  
in a powder dry field.  
*Amimorpha* under  
boards *Micryllus*  
under coquina boulder  
*Syllus* in its hole  
among salt marsh grasses

*Aphid* was found  
widely dist in open  
places in the scrub  
& much more plentiful  
than on my last visit -  
*Chorty rudens* on  
coquina where the  
short scrub is growing.  
*Parorya* usually in damp  
places among coquina  
marsh vegetation.  
*Aspilota* there also  
but not numerous.

& *Aptenopodes* there in  
still scattered ones.  
Scinto plentiful thru  
the bush, 1 *Anaxipha*  
taken in salt marsh  
grasses - much beating  
was done but failed  
to reveal them or  
*Tettigids*. I am told  
that in summer locusts  
appear here. Note  
1 of 2 *Leptoporus* n. This  
one was taken  
under a board - It looks  
somewhat different - Several  
of these were noticed. Isch.  
Sp. all taken under boards

$$140 + 185 = 325$$

K. west is being  
fast cleaned off -  
the only key showing  
signs of this at present.

5 Key West Fla - 111-16

Colony *Auricularia* all  
in center found in board  
pile - when stepping to  
the well formed *Carminis*  
eggs were noticed. *C.*  
*lutea* taken in dead  
grasses etc under same  
pile. Many *coquina*

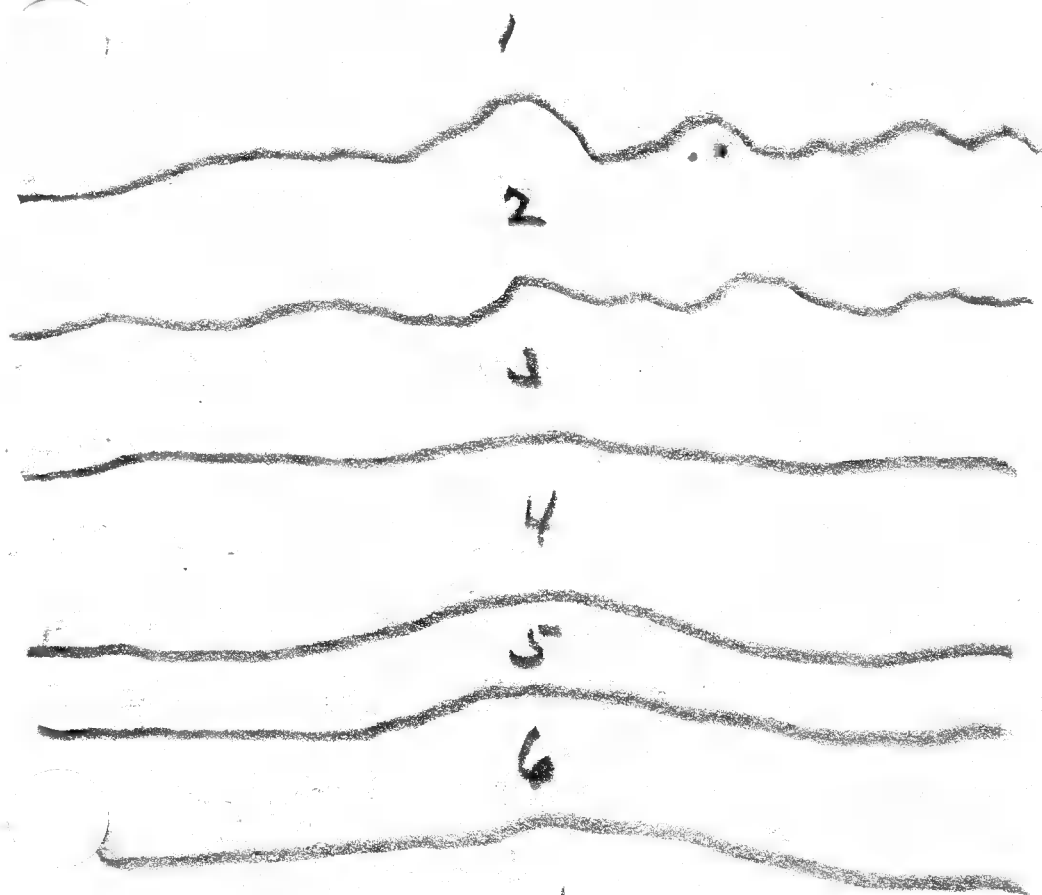
Boulders in gumbo limbo  
jungle. Found over -  
1/4 mile - from N. *Megastoma*  
alone found beside S.E. 1/4.  
The strand made of *coquina*  
boulders on *coquina* sand  
and sloped little back  
from the beach in sand.

*J. fidens* common - usually  
found in S.E. 1/4. *A.*

*constricta* occasional  
and *A. constricta* very  
plentiful - often colonies

open to sight. found  
under a coquina  
boulder in vegetation  
of plant (Euv. I) above  
2 *Scaptiscus* taken  
and by very long search.  
under cog boulders in this  
location a series of *T. rebe*  
were taken. The first boulder  
to reveal them had 35 & 14  
clinging to its under  
side all the rest were  
found singly. When the  
boulder is turned over they  
rest motionless and are  
of almost the exact color  
as as to be perfectly colored  
from a protective standpoint.  
They rest motionless but  
unless quickly urged  
will soon begin to  
run for the dark and  
if too slowly approached

The jury with such  
 reason & question  
 that it is utterly impossible  
 to follow their movements.  
 1 Stelprockera beaten  
 from a high sea case.  
 The Pycnosyllus were  
 taken while hunting  
 Gasteralis etc -  
 The beach is peculiar



1 sea 2 bare rock at  
 low tide 3 rock sand

4 black net - (all the  
plant in this I)

5 coccinea sand

6 the scrub. The odor  
emitted by *L. biden* is  
undeniably unpleasant.  
It is like that of carrion  
but if possible, even more  
disagreeable. - They seem  
to shut their claws  
then great forceps are  
weak compared with  
those of *A. maritima*.  
This latter species when  
disturbed rears about  
with its tail curled up  
and its forceps wide open  
for business. Thus *A.*  
*crucifera* does not do  
but pulls sharply -  
for the sake - whereas  
the odor of *Curculio* and  
*Curculio* is

disappear the specimen

of *T. fidus* still stick.

The *Stilpnoclerus* contained  
124 fully developed eggs  
and 14 partially dev.

$$325 + 160 = 485$$

---

6. Long Key Fla. III-17. Search  
in Cocoa Palm tops. Almost  
every one contained

*Tripulid* and by  
going thru very carefully  
sometimes 30 could be  
taken from a single  
tree. Saw 1 new sp. *Tripop*  
but couldn't get it. Spider  
cogina boulder. Numerous  
in under cocoa palm fronds  
also all the *Pycnolabus*  
& 1 pair *unus* made

$$485 + 150 = 635$$

Monroe Co.

7 Key Largo (Cont from Fla  
III. 18 In small grassy  
spot beside R.R. station  
& *Peromyscus* taken - All  
the nests were beaten from  
vegetation in dense  
jungle of gumbo limbo etc.  
It was so thick as to be  
almost impenetrable.  
Samples 2, 3, 4. The leaves  
of 2 droop in clusters  
and afford shelter  
for the <sup>minged</sup> jungle *Tiphopyrus*  
*El. Baileyi* - 1 *Scop.*  
*Peromyscus* taken - These are  
covered in sparse silver  
scales - prominent & at  
the jungle *Tiphopyrus*  
has scales only on  
under side and  
around segments of  
abdomen giving it a  
minged appearance

used a striking red  
- & black color.

The named insect  
killing stick was  
seated from a dense  
tangle of wild grape  
vines & climbing  
Puroria looks like  
atlantica. all the rest  
are decidedly the other  
- Plectoptera & Cystoptera  
also from jungle underg.  
 $25 + 635 = 660$

Dade Co.

8 Homestead Fla. III. 17. In  
prairie grasses in Everglades  
numerous plentiful but  
ungratable. Tenebrionids  
under board in grass  
2 adult Liph taken by  
much beating the  
mynths swarmed. also  
m. of Dictyophle swarming

1 *T. lateralis* *Tapus beatus*  
in high grasses

3 *Rhachnot* & *Aptus*  
*beatus* in high grasses

also 2 *Leptocoma* 3 *The*  
*Other* *Rhachnot* in under  
in pine woods. *Cyrtus*  
*beatus* from fig trees  
where a colony were  
singing at dusk a  
particularly high  
clear sweet note.

$$660 + 25 = 685$$

9 Homestead Fla, III 18

in pine woods. Nothing  
plentiful. *M. puer* scarce

1 *A. clara* 1 *A. aptera*

2 *S. obscura* *amblytrop*

occ. *Rhachnot* a little

more plentiful than

all adult. *Chortoph*

in open. *Cerplua*

occasional in open

spots. Parrot very  
local & not common.  
Myiellus in strawberry  
patch - Taken in  
marsh area of Everglades  
Tittigids. Muscivora (etc)  
ambitious which were  
taken in strawberry bed  
(in pine woods), and  
Tettigonia - Tettigonia beating  
dispersicollis & Tettigonia  
from under bark of  
pines. Also also Eurypterus  
1 called Spanish Roach  
from its small size. were  
Myiophila in near strawberry  
bed under ambrosia

$$685 + 95 = 780$$

10 Homestead Fla. III 19

2 Chortoph in <sup>apophyses</sup> pyramis  
arm of Everglades. *Leptysma*  
*crickets* & *Leptigids* there  
also - All scarce.

*Attantius* in pine woods.  
*Xiph* beaten also in mat  
Anson. *Biloccephalus* (small)  
and *Surtitia picta* (v. small).  
Anson adult under bark  
of pine stump.

$$90 + 780 = 870$$

P.M. On everglades Took  
series of numbers, *Leptigids*  
& *Xiph* between showers  
Also 2 *S. I. deropethiformis*  
*Lymnophus* under wet  
mud around "pot hole"

$$870 + 50 = 920$$

These last are at left  
end of top layer Box 2.

Dade Co.

11 Miami Fla III 20 - Cyrtor

native from jungle growth

N. ambrosius common  
under leaves etc along  
cleared street. Pyrene  
common under plants  
& stones. 1 S. gebr. under  
board n. In pine woods  
Rhadrat. 1 Leptura H

M. puer occasional

S. aureus not scarce

no Cyrtor see under  
rubber. At night -

Cyrtor spp. heard all  
over Cptal Grounds and  
by the Viceroy in  
clumps about walls  
& gates - Besides

that 0 - 19 heard

heard stridulate  
twice one night

920 + 40 = 960

12 Miami Fla. Nov. 27 -  
Series of obscure taken  
in higher pinewoods  
bordering along border of  
hammock. Puer  
locally common in  
wedges, in open pine  
woods. Scit. sandy roads  
Aupha in pine woods  
& along R.R. Tadia  
under bark of pine  
wing I saw in auto  
meat. Tettig or phylla &  
most Apter in swampy  
depression in hammock

Amblycony strid. Teggick!  
in wedge at night.  
Gryllodes in cracks  
about hotel constant  
song. Nervous active  
may be so swift that  
eye cannot follow in

Tryblus ♂ & nymphs  
all from grass along  
turner's courts

$$960 + 65 = 1025$$

*Anthracomyia* heard high  
in trees - 1 *B. germanica*  
Taken on Canech - ~~not~~  
11.11.28 *C. americana* ♂ ~~not~~

13 Taken in low spots in  
pine woods along S  
bank of Miami River  
Miami 11.11.28 *Leptysma*  
in cattail sandy spots  
*Panidra* & *Scutella*  
High <sup>were</sup> grass etc *Parosya*  
*Aphidius* 2 Tryblus  
in Royal Palm  
yard *Curculio* under  
bark on pine log  
*Xiph. Helicoides* &  
most nymphs in low  
swampy wet spots

almost bare in places  
*Anthyridia* under  
in pine woods

$$1025 + 100 = 1125$$

14 Oct Miami & Everglades

XIII. 28. In pine woods -

*Rhadrost* plentiful also

*St. pur* - A few *Placidia*  
taken especially by beating  
wire grass tangles

*Pelocoph* on found  
in this undergrowth  
on everglades and  
in swampy soil in pine  
woods. On prairie

area of everglades series  
of titigids taken. Wonderful  
standing on coquina rock  
in muscasses 3 at least

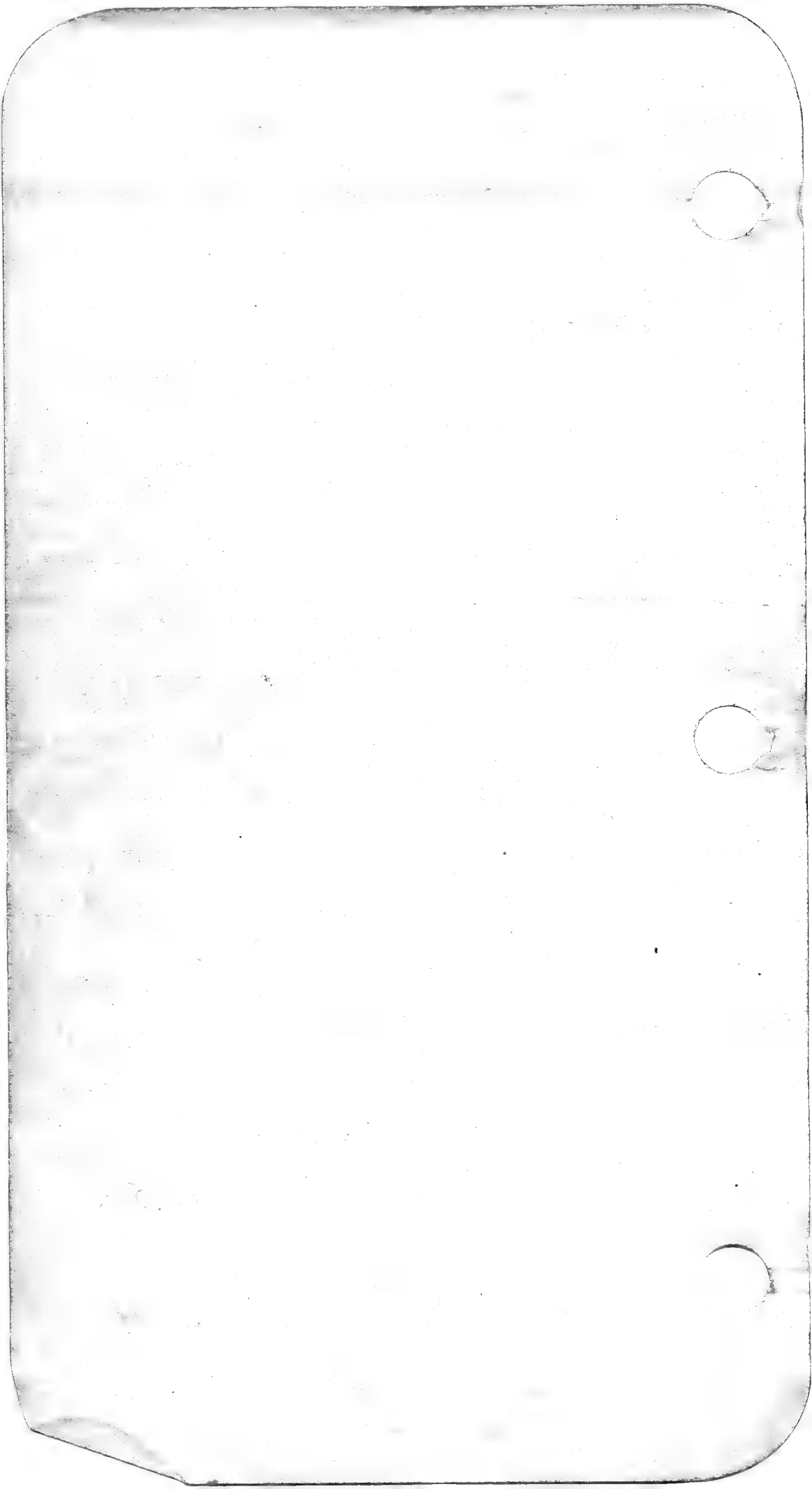
♀ in undergrowth of pine  
woods ♂ in prairie

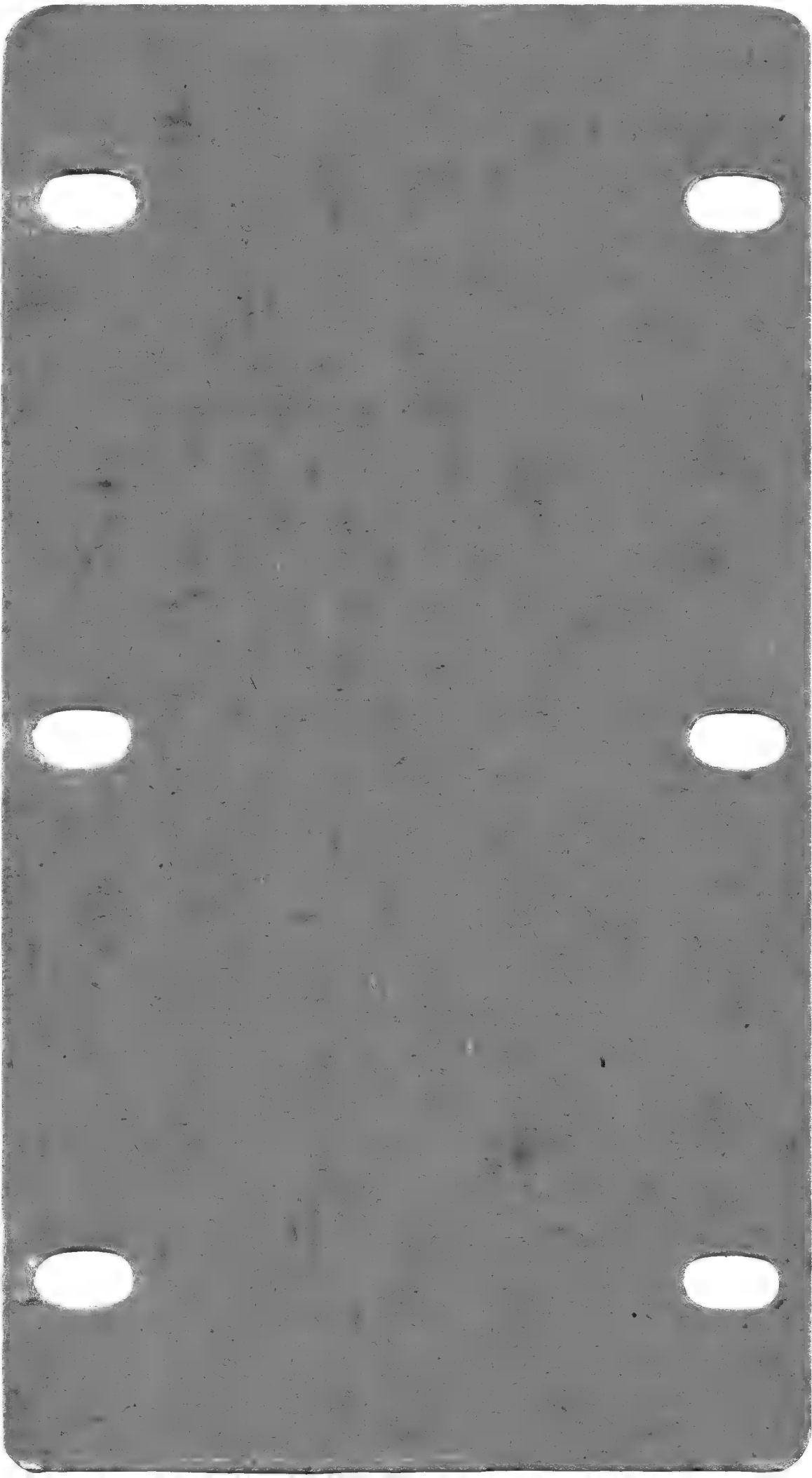
*Manomera* in clumps  
of wire grass and

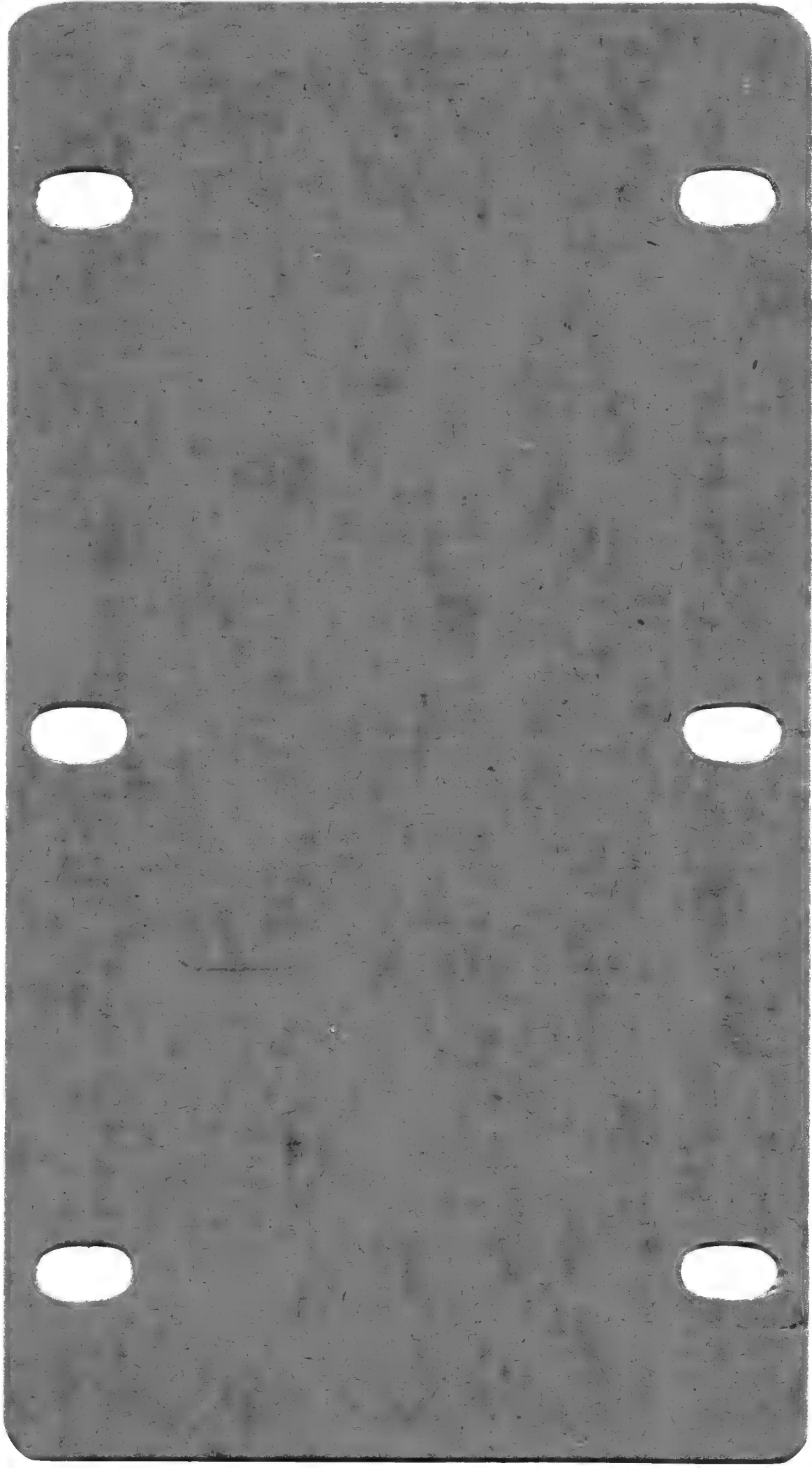
burshes (low) on edge of  
swampy glades also  
numerous on "prairie"  
& *B. rufus* ? ? ? ? ?  
*Hapithis* on undergrowth in  
pine woods - *Fabia* under  
pine bark or log. *Silvestris*  
& *Asphidia* & *Amitypogonia*  
~~*Colinus*~~ undergrowth in pine  
w. Colonies of *Dictyoph*  
on prairie & evergl -  
These are always found  
close together usually  
to the no. of 30 or more  
*Xiph* on "prairie" -  
*Querc. nemobius* ?? or  
*Hapithis* ?? undergrowth  
in pine woods -

$$130 + 1125 = 1255$$

Actual total 1314







1912  
\* 1913

July 3. Key West Fla.

H. sigillatus everywhere  
common about trees  
and human constructions  
Easily taken when  
not touched - app.

blinded by flash. <sup>50 1/2</sup> ♀

two or three M. laevis

heard 1 taken in

high bushy shrubs

12 ft from ground.

M. rostratus one

story of quite a few  
found 3 taken - Only

place heard giving  
their most peculiar

low rasping note very  
diff from any other

species - group

group group - Colony  
not uncommon & widely

distributed - faint Xipha like

note freq repeated -  
always near ground,  
low bunches of grass  
or weeds. Tryllus  
heard infrequently  
2 taken. Cono. mexicanus  
widely distributed - Found  
guzzing bird - Its  
one spec. taken in  
north. In Palafox  
poeyi taken on a  
plant in which Micro  
notus was found - This  
plant grows on the  
marly bare smooth  
coquina rock near  
the water's edge, but  
several feet above  
the water. This is  
plant sample no  
I.

July 4 Key West.

S. americana v. common  
thin scrub.

S. obscura acc and local  
in scrub near lagoon

P. poeyi fairly common in  
not heavy bushes esp. S.  
cassiae.

C. guadalupensis not rare  
in same as above not  
as common.

H. quadratus very occ.  
nally scarce in low scrub  
Adontot many nymphs  
few adults in grassy &  
woody tangles

1 Conoceph same place

P. paratyoides accas  
not uncommon in  
same.

A. clara likewise  
but few nymphs also

H. grisea on guinea lilies  
esp but also sea grape  
most about 2/3 grown  
but quite a few very  
young nym 2 ads. These  
not as nymphs have been  
said.

C. australis Common in  
scattered grasses along  
roads etc.

A. granul. Well des.  
three low scrub & also  
in g. lilies open forest.

T. citraria Very scarce  
on bare roads

H. grisea T. gramineis  
Very occasional in  
low veget on ground

Adactoxipha P. laevig  
Common in fruit store

S. suppletel 1 in fruit  
store

Holocampa 5 in same

P. annua - 1 ad (very  
no not taken) same

B. green 1 fairly large  
colony same - in  
a crack with more  
ads & no of larvae.

Clinoc. pulcher very scarce  
in green murrage & grass  
in scattered gums looks  
forest

C. pratensis scarce in same <sup>generally</sup>  
but nymphs very common.

$$270 + 14 = 284$$

1. In Jefferson Hotel  
B. green <sup>in cupboard</sup> annua P. austral  
very common all around.  
S. supplet occasional  
on walls, in cracks  
& cupboard. ♂♂/♀.  
D. blattoides 1 ♂ in cupboard

$$+ 284 + 13 = 297$$

July 5 Southern beach

T. citrinea occasional on sand.

A. maritima swarming under boulders & drift on beach

P. parox not scarce in veg back of beach where

D. americana swarms  
In. East Martello tower  
A few adult Adontot  
in grassy place.

A. annulipes and  
P. surcourei under  
boulders there.

A. olivacea common in  
salicornia and other  
halophytes growing on  
almost bare coquina  
in mangrove swamp  
section on E end of id.

$$297 + 63 = 360 + 4 = 364$$

2 July 6 Pine Key Fla.

On edge of mangrove  
fringe in tall bushes  
and low plants

S. obscura occasional

Mermiria ♂s not infreq  
♀ all minute but 2 ad seen  
1 taken.

Cy. guadalupensis a few  
beaten from these  
bushes

C. antillarum same

P. poeyi same scarce

T. gramineis 1 ad ♀ there  
in grasses 2 or beaten  
in underg pine woods

C. pulcher a few in  
underg.

C. pulidua a very few  
there & in underg of  
p woods

C. oliv 10♂? in mangroves

S. dunnii very scarce  
in underg of pine wds

S. americanus same.

P. parvifides there and  
along edge of key very  
scarce. No ads.

A. apt there (underg) v.  
scarce 0 ads

A. clara There and in  
green bushes on edge  
of key v scarce, had  
any ads.

A. floridae in green  
bushes beside RR in  
pine woods beaten.

A. granulata scarce  
underg in pine wds

H. guadel 1 ♀ (1 m (not kept))

in green bushes on  
edge of Mangrove sw.

Nothing common at all

B. germanicus swarms

P. americanus very abdt

Miss

P. australis abdt  
in Quarter Boat 2 and  
in ~~big~~ Pine Channel.

O. apterius Very occ.  
and found in green  
patches of herbage in  
pine woods.

$$364 + 198 = 562$$

June

July 7. Blab atropos  
common and few  
ms between old boards  
in wood house, many  
ms few and under  
boards on ground -  
Holocorymbus and 2 sp.  
The latter more num  
in wood house with  
Blab - They run  
about w great speed  
but do not go far  
to hide, resting often  
in the first bits of  
refuge to which they come  
Blab is widely distrib  
and well known to  
the natives about  
Key West where it  
is found in wood  
piles under boards  
& other refuge about town.  
The insects were

from

exposed either remain motionless or scuttle toward another place of concealment with not great speed - The myriapods are usually found half buried in loose damp earth under boards where they remain motionless looking much like mounds of earth (with which they are usually mixed dust) until disturbed. The single I. brunnea was taken with these as also 1 amulepes while the sursum were both in the shed & under board. Two very myriapodal

July

Plab were found  
recently submitted  
and pure white &  
soft.

$$562 + 85 = 647$$

July

1. July 7 In jungle brush  
of the Keys growing high  
over ones head and  
interlaced with vines  
U. maya 1 ♀ on ground  
near slightly about.

S. crepitans on ground  
under bushes - mould  
covered w leaves -  
a few scattered  
and one colony - Very  
hard to take as brush  
was too dense to use  
net and the insects  
flew readily - low  
& for short distances  
T. deropeltis 1 ♀ 2 ♂ in  
leaf mould there  
C. lutea a few mis-  
taken as deropeltis.  
S. obscura occ in  
these bushes

Great guinea All  
on tree trunks.  
usually <sup>as</sup> left from  
yr <sup>own</sup> lower on  
trunks and one or  
two high on trunk  
or branch among  
leaved branches.

A. occident Am.  
♀ in this part.

In grassy tangles  
near this scrub C.  
pulcher common  
Coccyz 1 ad, many  
no seen.

X. gracill. Not scarce  
A. apterus very few ads  
no numerous

P. paroty only gush  
not scarce in Bush  
treated above.

Wide seating of this  
Tangle failed to

juv

dislodge but a few  
C. antillarum, C.  
quadratus and H.  
quadratus - first  
most plant of 3 then  
quadr. This brush  
work is most diff  
as it is almost impos-  
sible to make one way  
through and out is  
almost out of quest  
while agaves, thorn  
bushes and prickly  
pear made hard  
work often painful.  
A. mayri in on  
bush in midst of  
tangle.

$$647 + 64 = 711$$

~~28. subject in Hotel Jefferson~~

711

July 7  
1 P.M. M. rostr as before.  
T. zebra In short grasses  
on str. pavy. track - Makes  
a faint kink-kink-kink-  
kink somewhat like  
Numenius but much weaker  
Heard several first night  
T. bideus crawling over  
surface of road - not  
scarce near stone  
piles & dwellings. E.  
rigens up in ~~the~~ <sup>the</sup> ~~climbing~~  
climbing about.

Very few Coccyzus.

Quail 2 taken strid  
a prolonged kxxee-  
kxxee - kxxee - kxxee.

$$15 + 711 = 726$$

$$711 + 39 = 750$$

Hotel left at night

2 ♀ supercil 750 + 2 = 752

3 Loggerhead Key Dry

Fortugas Fla. July 8.

Sandy Id covered w Bay  
Cedar bushes - A few spots  
black plants & prickly  
pear - S. americana  
quite common - C. australis  
common in colonies  
in open.

Xiph. acc. in grasses  
in open.

Conus same as Miami  
scarce - Heard about  
five from top of light fr  
which one could hear  
any on island.

Australas & german  
roadies in few mos  
in houses.

A. mayeri 1 ad male  
& 3 mos in Bay Cedar  
bushes in Afternoon

At night w lights  
The series was taken  
most were found  
hanging from the  
terminal leaf buds  
of the Bay Cedar, head  
upward - 1 pair in each  
widely distr over id  
but oftenest in small  
numbers on certain  
bushes - sometimes  
3 or 4 found on two  
or three adjacent bushes.  
Easily taken but if  
startled in seizing them  
they drop. Dr. Meyer  
gives Bird Key and  
Garden Key records  
for this species

$$750 + 71 = 821$$

Jan

3A Garden Key

Dry Tortugas - July 8.

Leptanthus very common  
in short grass.

Sch. amer. found  
in beach plants.

$$821 + 2 = 823$$

3B Bird Key D. I.

July 9

1 Sch. americanus on  
US bird res. house -  
Are these little orth  
can exist 1st bec.

St Jefferson covers  
practically entire  
surface 2nd bec.  
number of birds

$$823 + 1 = 824$$

1A Marathon Key  
Va. Fla. July 9

Belocephalus large

tangle of vines & bushes  
taken with light -  
many marks on the  
key

$$824 + 1 = 825$$

$$825 + 20 = 845$$

Small stuff from  
Loggerhead Key not  
counted before  
C. antillarum Key  
repassing - beaten  
from Bay Cedar

4 Homestead Fla July 10

On prairie - E. signatus  
very common - also found  
in med. fever nos.  
about pot holes.

Lept. marginic occ on  
prairie - common in  
tall saw grass growing  
in water.

S. carolina In saw  
grass.

Xiph occ. in pot hole  
& on prairie

Arch. not common - on  
prairie only -

Cestration Very occas  
on roads thru prairie  
common about bwe

Manoniera 2 small  
also on prairie. or. lat. 74 107 2  
western in  
hill road

B. floribacca On prairie  
scarce

P. atlantica Occas.  
in pot holes and  
in grasses along  
edge of prairie.

Mercuria infrequent  
in higher grasses  
near edge of prairie  
Amblytropid scarce  
in pine woods - No  
common.

A. granulata  
Uncommon in pine  
woods.

Thesprot 1 ♀, same  
Anisomorph 2 ♂ 1 ♀ 2 m  
in pine wds - ads  
under boards

Parilla beaten from  
under in pine wds  
in not decidedly  
wet loc.

Mott Common  
on prairie & in pot

holes - not as common  
as were in March

stercorales uncommon  
same dope.

Apt. clara - Very  
occ in green weget  
in pine woods &  
about pot holes

Apt aptera 1 ad only  
in underg of pines.

Ponoc 2 sp in  
pot holes

Ambycrypta small  
species found not  
uncommon in  
underg of pine woods  
always near or in<sup>dig</sup>  
small bushes w  
large green leaves.

Remob ambit  
under p wds  
R. cubsensis on pear  
not common

*E. niger* 1 ♀ in Both  
in pine woods Call  
under bark of dead  
pine.

*A. annulipes* Under  
board in yard.

*T. undulata* Under  
bark of dead p log  
in p woods.

*T. deropult* Under  
boards on very  
wet ground on pine.  
no numerous.

*E. lutea* 1 seen  
many no found  
under bark of dead  
pine.

*P. obscura* Beaten from  
under p. wds in  
not very wet loc.

*H. quadra* seen on  
only-beaten under  
p wds.

S. davyi very  
scarce under  
wds.

M. saundersi 1 ♀ / in  
saw.

M. juve very occasional  
in saw. - No very  
young.

A. apterum not  
scarce in pot holes  
in rank grasses  
& occ in undergrowth

P. punctulata very  
common there under  
live woods.

S. amicus 1 ♂ only, in  
jungle.

$$845 + 493 = 1338.$$

4 night work at  
Homestead. July 10.

Biloc very common on  
dwarf palms in pine woods  
2 taken on sugar cane  
1 on pine tree about 3 1/2  
ft from ground & one  
on low bush. Their song  
is faint and they cease  
upon seeing one appr  
even when ten or  
twenty feet distant  
but are very easy to take  
owing to the fact that  
upon close appr. they  
almost invariably make  
no attempt to escape  
but instead merely  
slip down the frond  
a few inches or  
around to the other  
side and flatten  
themselves against

it with caudal limbs  
extended rearward  
and cephalic limbs  
forward in which  
position they may  
be picked off with ease  
When seized they ~~voluntarily~~  
attempt to bite their  
captor and could

inflict quite a painful  
hurt on a tender  
portion of the hand  
with their powerful  
jaws which are built  
for cutting the tough  
palm leaves - Their  
note is very low and  
consists of a succession  
of zip - zip - zip - zip  
- zip - zip - zip - zip  
Manofofura & Wynsonia  
were out on the edge  
of the palm leaves

The latter ✓ common-  
Onocceph was only  
occasional, exceedingly  
shy - flying wildly  
away immediately  
upon ceasing their  
song when approached -  
They would be almost  
impossible to capture  
did they not continue  
to sing when until  
closely approached. The  
fuscocristat and  
retusus appear to  
certainly be the color  
phases of the same  
species - Their song  
is the same  
krzzzzzz - krzzzzz -  
krzzzzz - hum.  
near each note is  
marked to begin with  
a sharp buzzing.

June

A. flandana. One  
spot on the prairie  
near its edge where  
the grasses were tall  
was filled with this  
species - so plentiful  
were they that there  
was no necessity  
to locate singers  
but I walked about  
picking them off.  
The grasses on which  
they were fearlessly  
perched. Their  
note was a buzz  
and chuck which is  
almost impossible to describe  
+ George on bark  
of pine near its  
base.

Pine Woods Quiblyc  
very common but took  
flight immediately

fun

before it could be  
located - no great  
effort made to get  
individuals as I  
had no citronella  
and waiting was  
bad - many mosquitos.  
Cyrtos heard common  
in trees back of house.  
In kitchen.

P. americana in  
swarms.

T. brunnea common  
and very active.

$$1338 + 52 = 1390$$

juv

4 Homestead Fla. about  
station caught in spider  
webs.

- ~~3 Anthrax all Talus~~  
~~1 B. adpersic " "~~  
~~4 Ischnopt 3 " "~~  
~~many T. graminea 1 " "~~  
~~1 Pris. americana 0 " "~~  
~~2 A. floridana 0 " "~~  
~~2 small Amby 0 " "~~

1390 + 8 = 1398

5 Key Largo Fla. July 18.

S. americanus common in  
weeds beside R.R.

S. obscura occasional There

P. parvory

A. apterous Very "

C. quidblackii Beaten from  
bushes

$$1398 + 6 = 1404$$

owing to the fact that  
the forest of Largo  
has been destroyed  
by fire on both sides  
of rr. we were  
unable to reach it  
& could only work  
in weeds & bushes  
on ground - These  
not original species

6. Jew Fish, Mourse C.  
Fla. July 11.

C. mexicanus Many  
in grasses, 1 taken  
X. gracill V. common  
in grasses.

P. paroty a few in  
low plants & grasses  
Sch aner V. common  
in low plants &  
grasses.

E. antillarum

P. rufimanus is  
a few under boards  
in yard.

Gryllus a few in  
racks of new packed  
marshy soil - On  
this in bare spots  
a fair colony of  
Urocytt a few  
T. armata = P. rufimanus

1404 + 110 = 1514

7. Detroit Fla. July 12.

In heavy Hammock.

I. llerida 1 ♀ dislodged  
from bromeliads growing  
on oak. . 2 very small  
ms. beaten from heavy  
bush foliage in Hammock.

C. guadalupae 1 ad (few  
ms seen). beaten from  
heavy bush foliage in  
Hammock.

Ichnopt? m. on oak  
in Hammock.

In typical saw grass  
growing in knee  
high water of glades

C. malivolutus

Archel pulch not  
scarce

P. floridana common

I. marginis occas.

On edge of Hammock  
in pine woods

undergrowth

Amblec florid 2

a few Mammocera

C. antill in weeds

along R.R. & from

foliage in bushy

undergrowth of Mammocera

1 on C. trigonipalpe

from oak.

17 I. despectif under  
board in Mammocera

$$1514 + 80 = 1594$$

P.M. same region

I. lucida beatus fr low bush

$$1594 + 48 = 1642$$

Homestead and Detroit-  
examples of plants.

Pin - of the woods  
here.

Palme w. seeds - usually  
not 3-4 ft high -

Bolocarpum plant.

Palmetto ditto. but  
not nearly as much

Epiphytes - Cattail

negundo and

Taxodium - taken  
from oak wood.

1244 + 48 = 1292

4 Homestead Fla. July 12

The single scarce thin  
brown conoc is in the  
pine woods, very shy  
& scarce - Very few to  
be heard. 2 seen 1 taken

The green sp. is common  
in the glade grass.

S. rubris on R.R. track  
makes a stronger &  
strid note diff from  
the nearly sharp of formis

P. M. Homest. 1 Perth  
under sq boulder in  
glades near edge -  
1 Parula under of  
pine woods

1642 + 71 = 1713

8 Long Key Fla. July 13

S. annulicarpa very  
common everywhere in  
low grasses and plants  
S. obscura Not scarce  
in Keys bush.

A. clara occ. in low  
grasses & plants.

Mormiaria not  
uncommon in places  
where high grasses  
grow on more or less  
depressed areas.

H. quadratus Beaten  
from Keys bush.  
not scarce.

C. grisea scarce in  
same — prefers  
bushes & low trees  
with wide leaves.

M. rostratus as  
beaten from same  
bush as at Key West

fruits

which grows on edge  
of mangrove swamp  
here.

C. mayeri 1 m beaten  
from Keys beach.

Asphondylia occurs  
in same place as Ula

P. paratoid occurs  
in same place as Saur.

C. antillarum in Keys  
scrub not common.

1 note a murder

$$1713 + 51 = 1764$$

# Florida Totals

Key West	364 + 203	①	567
Pine Key		②	198
Loggerhead Key		③	91
Others	4 + 6 +	Largo ⑤	10
Homestead	553 + 71	④	624
Jew Fish		⑥	110
Detroit		⑦	128
Long Key		⑧	51
			<hr/>
			1779

4371 = 10 + 2151

9 Sulveston Tx. July 19

In sandy soil back of  
beach overgrown with  
sand loving plants  
& grasses low and "  
soft cedar clumps" with  
areas of plant (sample  
kept) growing 6-10 ft.

In these Archid. not  
heard - heard a  
long buzzing bee  
somewhat like note  
of some cicadas w.  
few clicks in between  
Under these bushes  
in short grass

N. maculatus in  
one spot common

In depressions w  
abund of grass

N. socius swarms

1 littigid by the tree

2 sp Arphidulla  
common in low  
veget. The smaller  
very abd. Chort  
common - P. amplex  
common in colonies  
in more sandy  
spots. 2 Quest.  
primal like there.  
Amplex. occas.  
in this low stuff  
melanoptes very  
scarce. Paraid not  
scarce in grasses under  
clumps of plant kept.

$$151 + 0 = 151$$

Webster Harris Co Tex  
 July 19. On prairie  
 2 Booped only - 1 ♂  
Brunneria later from  
 low plant - 1 ♂ later  
 and P. dykei occ  
 beating - Arphia  
 scattered & occasional  
 makes quite a din  
 later when flies of  
 large Arphia very  
 common smaller com.  
Amblyc small occ  
 in clump of weeds  
 I plants Parasit same  
Xiph common Dity  
E. costalis common on  
 almost bare black  
 mud edges of roads  
Melanoplus v. occid.  
Xiph strict occid.  
 in plant clumps there

also 1 Parrot & 1 Quail  
Wort comm everywhere  
All scarce beaten  
Stagnone ✓ also

$$151 + 92 = 243$$

11 Dickinson Galveston Co.  
Tex. July 20.

M. auratus very common  
under pine woods  
everywhere.

S. nebulosus common locally  
same sp. (about beetles)  
on ground.

A. pulchellus there very  
scarce. 4 ads

A. regius common  
about bases of tall  
green plants on edge  
of stream thru woods.

S. brevis in there scarce  
little on wet ground  
near stream in low  
green plant etc. 2  
smaller (sp?) under  
pine woods.

M. robustus not common  
in bushy places under  
pine woods (about 100 ft)

2 taken there also  
1 other Ampelis sp.  
on edge of pine woods.  
1 Sund in green plants  
on edge of stream.  
Mel. sh. w. very occ  
in open short grass  
spots in pine woods -  
as many very as seen  
as ads. A very  
few Parus same  
gen loc. X. strickum  
nowhere common but  
widely dist in low  
green plants in pine  
woods. I. foliaria  
under dry cow dung in  
pine woods. Ardea  
fulva seen abt  
throughout pine wds.  
Ardea smaller on edge  
of wds & over plain  
common.

Except cost commensal  
along road.

Asphidia conspicua  
edge of wds in grass  
Syrb adum. in many  
no. fewer ads in  
lower green grassy  
spots in pines and  
a few thru wds.

Short everywhere  
not always abdt  
Syrphid in pine  
wds underg.

1 Dict in dense spot  
as Syrb. 1 Acc beaten  
from bushes there.  
1st great yellow lined  
Selastoc seen but it  
flew up into tree tops.

E. minuta on bare stream  
mud places in swarms

$$243 + 230 = 473$$

9. Halveston Tr. July 21  
Dune Beach - H. subros

very common on beach sand  
to seaward of dunes and  
well dist<sup>n</sup> in most sandy  
areas - much more widely  
dist<sup>n</sup> back of beach than  
apudicarius

$$473 + 90 = 563$$

12 Virginia Point, Galveston  
Co. Tex. July 21.

An old salt marsh  
best dry ground - In  
open spaces L. schaeffele  
in large scattered colonies  
fly in erratic zigzags  
but are not as quick  
to alight as laticornis  
and when not pursued  
will often swing back  
and alight from near  
where they started - always  
alight on a bare spot  
The ground was somewhat  
salt encrusted. In grass  
mats of grass tall 1-2  
ft high often Callitriche  
will diste, Abies  
littoralis - These  
insects are usually  
found sitting horizont  
in grass about a foot

or more from the  
ground, then ~~up for~~  
they climb <sup>away</sup> quite  
vigorously through  
the grass but are taken  
with great ease as they  
never climb down.

X. neophoid name  
somewhat more  
plentiful - a quite  
different species to  
take as they are very  
nifty and immediately  
seek shelter by jumping  
down low in the clumps  
of grass where they are  
very hard to follow  
2 Aysia 1 Coccyz  
2 M. fumea - a & by  
beating several Oec  
and 3 C. squamos  
& 1 very large Memob  
under board & 2 Scyllus

same in these grasses  
Atriplex common  
than this area. still  
Atriplex only very  
few on somewhat  
raised beach in low  
grasses - S. maritima  
common there under  
boards. X. strictum  
not uncommon in  
place where this  
tall grass was more  
interfered w weeds  
on slightly higher  
ground. Parasitica  
there and found  
there these grasses also  
2 Atriplex in these  
grasses - Note that  
there are probably 2 of  
S. citr common on beach

$$563 + 142 = 705$$

13 La Marque Galveston Co  
Tex July 22. The prairie  
absolute - Low grass and  
plants - Very little ortho-  
1 Chioce, a very few Hadro  
in small bare spaces.  
1 Mioq under cow dung.  
In higher plants w  
dry grasses 1 ft or more  
high & few ramp  
vines 3 Parabac  
1 Mauouera a, few  
Prumeria w very  
hard & long cont.  
beating - There also  
S. aurea small colony  
and all Squid and  
Amblyc fun tamen  
M. fun rub not  
scarce - Chort & Arph  
more common.

$$705 + 74 = 779$$

14 Beaumont Jefferson Co.

Lx. July 23. Low ground

$\frac{3}{4}$  pine woods  $\frac{1}{4}$  decid trees  
under low grass and  
one species of bush.

Mugo common widely  
distr. on prairie also.

D. viridis common

a few Asphodela - larger  
only in woods -

swampy ground

$\frac{1}{4}$  pines  $\frac{3}{4}$  decid trees  
under tangles weeds <sup>some</sup>  
ramp vines - A. pulch

common, few colonies  
of Arise few Xiph very  
few Choc 3 Squid

occasional Cryxalis  
not scarce J. lateralis

On bare wet ground  
around grove Vic font  
series J. arumata &  
Acyd also few not them

the latter also in  
grasses pine wds &  
prairie - C. diaph 1  
beetle from under pine  
wds, 1 under sign on  
oak along river at other  
end of town (5) & 1  
major ads from under  
dead bark of pine stumps  
& Heb beetle under  
pine woods. Chort  
~~not~~ occ. one prairie  
also small Cryph  
one small colony found  
of E. costalis on bare  
place in prairie. 1  
Conoc ♀ on prairie  
Ellyes w. I. armata  
v. scarce. At night  
N. fusc v. common  
on str under <sup>in corner under</sup> pine wds  
2 see Neuro 2 Tryp 1 Chort  
779 + 196 = 975 18 = 983

15 Doucette Tyler Co. Tex.

July 24. Conditions  
almost = Fayetteville S.C.  
M. robustus fairly common  
There scant undergrowth  
pine & decid mixed forest.  
S. bolli common There  
Cyrtophyll on one very  
small green bush in  
deep forest.

C. columbiana scarce  
in low bushes esp sweet  
gum. P. pulchell loc  
common same

C. trigonif v. scarce same  
Hap. <sup>except</sup> us. commun Arach <sup>not kept</sup> few "  
More in open, in low  
bushes large Ambley &  
co. scarce Small sp  
common Schistoc loc  
not rare 2 sp Arpua &  
There both rare Walking  
sticks here etc Red

scarce in undergrowth of  
pine woods. S. P. foresti  
in somewhat sandy spot  
in opening in pine wood  
Hippuris local w Arphia  
Arche scarce up in bushes  
in pine wds. Stethorus  
on sandy bed of stream

$$983 + 147 = 1130$$

16

16 Rosenberg, Fort Bend Co. Tex  
July 25 - Rolling country  
covered with rich green  
weedy knee-high growth  
with patches of taller  
plants such as coffee bean  
and dotted with acacia  
bushes some 12-15 ft high

one Amblyx very common

one Auphelia "

a. grallator 2

C. viridifasc occasional

a. leptola common

M. fumer-r "

M. differ v. " in taller growth

Paraid \ occasional

H. specios common in  
taller sp weed.

ab w Melanox common  
In heavy rank grasses  
and weeds along  
R.R. substantiated

Memoria common

~~Pyridosper~~

~~Parabacul~~ very common

X: ~~stact~~ ~~source~~ also

~~gen dent~~

Stipator occ in low  
very heavy grasses -  
V. easily taken - made  
no effort to escape.

- At edge of some ~~hammock~~  
among heavy grasses

Boopidon <sup>NOTE</sup> locally common

Mel. robustus common  
around bases of bushy  
clumps.

E. costalis common v.  
local in these grasses  
1 Mimobius & 2 Gryllus  
esp no of latter common.  
a very few Acrida &  
Conoc. in high  
grasses along stream  
& depressions.

D. viridis common  
in grasses.

Scudder Texensis 1 on  
coffee bean patch  
1 Dicty. in same place  
as stipator  
→ Boopisodon - ♂ very  
easy to get, they spring  
and fly a few ft &  
make no attempt  
to hide - ♀ o. spring  
heavily and at once  
burrow into densest  
grass where they are  
most diff. to find  
I got Schist on  
Acacias along edge  
of wood. 1 of these was  
seen in forest at Dickinson

$$1130 + 195 = 1325$$

Rosenberg A.M. July 27  
Melanimia in one spot  
 found very abdt.

Stipator much more  
 active than yesterday.  
 and hard to take owing  
 to heavy cover.

1 Ischnoptera last night  
 at light.

$$1325 + 80 = 1405$$

Diptera perennans

$$1130 + 152 = 1282$$

17 Victoria Tex. July 27

Ground much overgrazed  
grasses low & dry - in  
all directions acacias,  
heavy in spots.

Mesochloa common  
in very dry grasses  
in open - a few larger  
ones in weedy field  
Eucropt costalis occurs  
in open

E. texensis 1 on bare  
adobe.

All Phudoserua (?) &  
1 Parabacill same  
place as Mesoch (along RR)  
in heavy low dry grass  
Short occurs

2 Mistobregma

ads. Syrph occurs  
v. common w Mesoch  
a few orphan in same

P.M. Vict - 1 N. maculatus

emits a high and constant shrilling stridulation very loud for a Membris taken on stone in short grass

July <sup>27</sup>~~28~~ Vict. In stream bottom in tangle of reeds growing in high weeds under trees.

C. antell <sup>v</sup> ~~common~~

Hapith ~~common~~

3 Caenptonot

Arche pulch (?) not uncommon in high weeds -

In field thickly overgrown with grasses and low plants -

Arcthaea pallat

common in plant with three leaves -

Stipator scarce on ground

S. americana common

S. lineata Taken - has  
a very powerful flight  
rising high into air  
but did not go v far.

H. pratensis fairly scarce  
in weeds

H. speciosus occasional  
in same

Diaph or Pica Pseudosera  
fairly common

Parabacill occasional

A. mastiga occurs  
in plants w broad  
leaves

Acrobly sur sp occurs  
in higher weeds coffee  
bean etc.

Xiph long wing common  
also Acacanth

X. atropis occasional

Melanoplus scarce

Chort and Syrb common  
Conoc  $\sqrt{v}$  scarce

Musoc several Oxyphlella  
not common larger of  
scarce. Many occasional  
The Arcturaea is very  
easy to take they climb  
up into the higher weeds  
where there are about  
2 ft high. When  
approached they  
shutter up and then  
with wings set and  
legs extended let the  
wind carry them on  
usually going but  
a few feet. They allow  
themselves to be picked  
up easily & apparently  
are incapable of quick  
movement. The Oxypt  
were very many with sealed

The other Buck? was  
studied loudly in weeds  
along dry stream bed.  
I. cetonia & Mesotabe  
both scarce in dusty  
road; Bruxia all  
met taken in with  
weeds in field.

The country is so  
under culture that  
it is very diff. to find  
natural conditions.

$$1452 + 210 = 1662$$

Clip, Holiad Co. Tex July <sup>27</sup> ~~28~~

*H. saundersii* common in  
low dry grass beside RR

1 taken also 1 *Anthracis*  
only one seen brief stop

$$1662 + 2 = 1664$$

18 Brewster Tex July 28.

In mesquite country  
undergrowth dry yellow  
grass only - 1♂/1♀ O. unper  
Musochel common

In tall green grasses  
beside R.R. 1♀ Parabacul

Pseudoperu <sup>(31)</sup>? A. thermaria  
common (Rosenberg Sp. 88??)

In open land between  
post oak etc thickets.

Short plants & grasses  
w patches of Opuntia

S. admirab fairly plenty

S. antic very scarce

A. variegatus scarce.

H. pauciflora in colonies

locally common also

here beside road

Short very common

Psolossa or scarce

Certhiaea frequent

Arphia occasional

1 Hesp speciosus great ♀

In green spiny bushes  
of different species  
Rosenberg Stipator v.  
common. - Large black  
Stipator v. common  
esp. in heavier bushes  
S. grandis brown &  
green occasional in  
these bushes. The green  
form found usually  
up in the bushes -  
quite a few of the  
brown also taken  
on dead <sup>up</sup> leaves on  
ground in root  
oak thickets - All  
three were found in  
the same bush once

The two similar steps  
live in the bushes &  
when after jump wildly  
about - most go down  
but some leap up thru  
the bush and reaching  
the terminal branches  
rest & then leap off  
to the ground with a  
thud - Often two or  
three dozen in one  
bush but only in  
certain parts of the country  
for miles none can be  
found. The other is  
more deliberate - it  
climbs about the bushes  
and leaps much  
less - When found  
on the ground it  
seeks escape by a  
succession of mighty  
but slow hops then

concentrating itself as  
best it can in the  
leaves. Rhabdophis  
found in bushes, it  
is a slow species but  
remains in the densest  
part of the bush and  
is so, very hard to take  
In low bushes with  
some green vines  
and tall green  
- Placit about 1 ♀  
Rana by beating  
the leaves. common  
there - occasional  
in other bushes -  
In the woods near  
these bushes Parus  
very common, 2 Dolops  
There a Triton  
very common  
We almost have  
spots Incisura Incisura

common - Mesobes  
more generally  
dist. occasional.

M. sh. w. in green  
weeds - 2 Cryptopitell  
beaten there. Darts  
near there 1 was about  
on ground & 1 ad taken  
also several miles dist.

S. americanus common  
in our colony in  
open - 1 gray moth  
Ochistoc in post oak  
got away.

$$1664 + 280 = 1944$$

19 Corpus Christi Mexico Co  
Tex July 29. On beach  
of ground w/ shells with  
scant line of beach grasses  
Heliotropium suberosum common  
in colonies -  
In heavy low growth  
of beach veget back  
of beach Sph. cristatum  
common in colonies  
Hipp. saussurei same  
but not as frequent  
J. citr. very common  
esp along roads.  
Melanop. occasional  
Paraid everywhere  
Mesoch. fairly common  
esp in dried grasses,  
in some places colonies  
of Pisum aruplic &  
still often in much  
the same area around  
Mesoch.

In salt flats on bare  
spots halophytic  
*T. schafferi* common  
in scattered colonies  
1 *S. saga* another seen  
both very shy  
Other schist Lee? in  
wads colony of 5 or 6  
In beach plants left  
specimen kept where  
a small joint cactus  
was very about the  
series of Cephalotus  
taken by long search  
they are local & tho  
found occs. Hopping  
from plant to plant.  
The majority are  
found down in  
the plants where  
plants are about 7  
ft high & thick.  
The insects are

rather deliberate  
and remain in  
them. I suspect if possible  
but when they jump  
they spring powerfully  
& the males were  
noticed to use their  
wings and thereby  
prolong their last  
Diapause in plants  
& grasses nearby  
2 Dichopet on there  
B. acutic ads very  
occ as. common  
in such places.  
Somnath occasional  
in beech veget  
Emopt likewise

$$1944 + 243 = 2187$$

20 Gregory, San Patricio Co., Tex.  
July 30. In small spot

of marshy veget. Arch very  
common - sing very loudly  
a constant buzzing sound  
from this area - Espec  
loud during morning  
and again increase in  
volume but of a more  
subdued tone & less at  
night. Conoc very

common in high grass  
very tenacious after dark  
all taken w. flash.

Petunia in almost  
every other low clump  
of mesquite or other  
thorn bush, a few also  
in tall clumps of weeds  
sing loudly in a few  
but practically cease  
by noon and do  
not sing with any

in the case, until after  
dark - Their song  
is a buzzing bag-zug-zit.  
repeated rapidly three  
or four times but when  
excited this is necessarily  
repeated. They rise  
toward the top of the  
foliage in the a.m.  
almost completely hidden  
but at night they  
are found strid toward  
the topmost sprays -  
one ♀ taken in a.m.  
on stem just below a  
strid. ♂ The other  
seen from a tank  
near the ground at  
the foot of one of the  
bush shrubs - The  
insects cease their  
song before a close  
approach can be made

and in the green  
foliage are <sup>very</sup> very  
difficult to locate - Their  
movements are deliberate  
& more crawling than  
leaping out. When alarmed  
they throw themselves  
into the lower pts. of  
the bush where it  
is usually impossible  
to find them. 17

S. grandis in mesquite  
The other Slipator is  
everywhere very abundant  
in the brush - Some  
bushes are full of them  
& about precisely near  
they are also very  
common - Ant-hills etc.  
have all the roads  
filled with these insects  
& one barrel of trash  
must have contained

Smistoc, occ. - far - near - mid -

mermer occ. very where  
more than fifty.

1 Abigoupe u, Appluella

occasional, Mesoch  
common, Arphia  
occurs in low yellow  
dry grass between mesq.  
Brope don. There also  
mod. common.

Hesp 3 in green weeds.

2 Dichop only in  
green tangle about  
mesquite Quercus.

except common on  
bare earth.

1 M. fl glaucipes only,  
in mesquite.

Parasit common - very  
M. fun not common in  
cultivation.

Must be common as  
on rock place.

21 Brownsville Tex.

July 31. River bottom

Beaten from tall rank grass  
weeds, sunflower etc

*P. oblongata* almost common

*Chor. texensis* 1

other sp. all seen taken

etc *A. quadrip* occasional

*P. minima* common

(There are 3 sp. occaunt  
the slender pale lace wing  
sp. is found near the  
ground - all were taken  
in one place - *Diloph*

msp 10:15 pm both from  
vines growing over low  
mesquite as were all

*Hapetures* Night at  
light 1 notable

Jaw *Stylus* 2 *Naobis*  
and *Spiddria* very  
common also a few  
*metabres* etc

Cryptopt in high weeds  
as before described,  
Cyclopt in low weeds.

$$2320 + 146 = 2466$$

1 Stegator taken on  
station

Robstown Tex. July 31.

Brownsville, Aug 1

almost  
2 sp. *Dichops* - all  
same tann. after being  
& constant search - They  
are in tangles of  
"fattery" "flower" vine  
in the open grassy  
spots near mesquite  
and are local &  
scarce - They  
seek to crawl on  
top or drop into  
recesses of their cover  
when approached so well  
protected are they by  
color that they had  
best be beaten -

2466 + 186 = 2652

22 Point Isabel Aug 2.

On adobe flats  
covered w. a mat  
veg & very little grass  
Nestor only common  
T. schaefferi on bare  
saline adobe in  
colonies of few —

1 Heterostus serbes  
There beside road.

2 or one colonies  
Hades in tall wharf  
nearby grasses w  
shorter lower grass  
2 small mantids  
on saline adobe —

2652 + 1175 = 2737

Brownsville at Aug 2

2737 + 3 = 2768

23 Piper Plantations Br  
Tex. Aug 3, 1912

Hoplosphy in debris under  
palms in heavy jungle -  
locally moderate nos -

There A. abortiva all new  
taken 1♂ 2♀ - 1m also in  
dead leaves of palms on the  
tree. 1m H. tuberculata

beating from vine tangle  
in muscade jungle.

There occ red antennae <sup>fairly</sup> common  
2 acc lace like - Melampus  
n sp green tarsi very loc  
one one colony in <sup>low</sup> muscade  
sprays covered a tangle of  
vines & Dichopel also.

ach minuscule fairly  
common in grassy spots  
in this jungle - Neelan.

the wing occ more in  
open. All explan in  
jungle over see & trees

vine covered. / Croton  
in high green grasses  
in opening in jungle.  
The new Emelacophilid is  
a bush tangle cover -  
not active but hides  
very skilfully - Dichopet  
= makes a faint tick  
repeated at intervals  
of about 2x length of  
noise - They were  
heard in a number  
of vine tangles in bushes  
& on the fences beside  
the road.

$$2768 + 230 = 2998$$

Loma Alta

24 Lake Loma Alta Tex  
Cameron Co. Aug 4

An adobe hill covered  
w cactus & few thorn  
bushes - In the point  
cactus only, Cylindropuntia

1. Stipa in Opuntia  
patches on adobe flats  
open country - some  
small colonies -  
2 of the 90 had  
crops full of ripe Opuntia  
fruit. Parasit were  
yellow & common in  
halophytic veg on  
flats, others common  
on bushes. Hillside  
S. schaffneri common loc  
on bare ad haloph flats  
Few Hadroneura & Spha  
along base of hill in  
haloph veg

2998 + 51 = 3049

Brownsville Aug 5.

Loose open rats nests in  
open all water runs.  
~~Tables~~ - ~~House~~ ~~all~~ ground  
cup under debris &  
leaf mold under mosquito  
~~Pycnos~~ all on solid  
ground surface under  
rats nest. ~~Exclusively~~

all at bottom -

~~Quip~~ ~~about~~ ~~found~~ ~~among~~ ~~twigs~~ of rats  
nest above ground -

Haplosphy very common  
~~throughout~~ nests but  
almost all reynolds  
& usually not  $\frac{3}{4}$   
grown.

$$3049 + 68 =$$

$$3117$$

25 Mission, Hidalgo Co. Tex.

Aug 5 In low bushes  
of desert appearance with  
some little grass. Very  
few of all but Wester  
v. common and Paraid  
swarming up in green  
weeds - The Myth  
was found among a  
lot of the latter.

P.M. Exilop 5 heard  
in and searching  
They are in bushes &  
plants often five ft  
from gr. Song somewhat  
fainter than that of  
Brown sp. - also I  
noted that occ they  
would utter faint  
chirps and a sort  
of big trill which would  
deceive one into  
thinking the insect

till several feet  
away when it was  
only but a few inches  
distant. Eucrypt comes  
at light and a few Nests  
It would seem that the  
Eucrypt is so often found  
at lights because this  
sp frequents roads &  
so would be nearer  
lights & cry after  
more easily than the  
others more distant.  
Hormio lit on illumina  
tion when I was visiting  
Hormilia. They lit &  
flew into lighted  
windows striking with  
a sharp blow against  
my face.

$$3117 + 78 = 3195$$

# Rehena

A specimen of Rehena  
spirosa taken at  
Danao Texas - has been  
examined - It has  
been in captivity for  
several weeks & is in  
a flourishing condition  
It has been offered  
diff kinds of plants  
and also various  
grasshoppers, the  
large greenest - "stained"  
cicada & other insects.  
It did not eat much  
veget but devoured  
the insects ravenously  
and eats worms too -  
It also relishes water  
& drinks frequently -  
Its sound is a loud  
and sharp szik -

---

25

mission Aug ~~July 26~~ Ele. 138

Arphia occasional 1  
Mermiria in area of  
 rather arid country  
 covered with high mesquite  
 and a great war probably  
 near Koberl speciosa etc.  
 1 Holmes holleana & 1 a  
Hoplosphy dug out of  
 rats nest.

$$3195 + 15 = 3210$$

Ele. 175-200 ft.

26 Laguna del Gato, 3 mi  
W of San Fordyce, Hidalgo Co. Tex.  
Aug 6. An small rounded  
hills of loose gravel covered  
with scattered bunches of low  
plants - decidedly desert  
appearance - the gravel  
Tornoeotus common

Westob

See bushes Paraid common  
The <sup>very</sup> green low bushes w/  
long rather broad leaves  
in some places Dichopet  
very common locally, 1  
Ceratites hanging to lower  
side of one of the lower  
branches of these, 1 Probac  
in grasses at foot of same  
Realt lucida Melampyris  
R. juncea palmeri  
found is a desert  
plant fragrant growing  
in clumps but in others

plants as well - other  
Mel. Rhabdot 3. slight  
more common esp. in  
Dichop plant - neither  
ad. - The small beetle  
very active and elusive  
1 Litaneutria ad. in  
Dichop plant 1 in on  
ground - In wet  
soil on edge of water  
where low very green  
plants grow 1 Tettig &  
a few Eucop (1 Taken)

$$3210 + 122 = 3332$$

27 Lyford, Cameron Co. Tex  
Aug. 6 & 7, 1912 R. & H.

At night Rehnia vict  
occasional - fairly common  
in mesquites & other  
bushes - Most a few  
feet fr. ground but  
none in top spray of  
mesquites 12 ft fr  
ground - These latter  
were the easiest to  
take - They seemed to  
realize their flight and  
would not jump  
unless actually touched  
even when their resting  
place was pulled  
down within reach.  
The species utter  
a number of  
different sounds -  
the sound described  
before under Gregory

in their regular song  
when disturbed. They  
cease this but often  
utter several times  
a fluttering objection  
while I have heard  
the species give a  
call note ~~zick~~ zick - much  
like that I heard *P.*  
*spinosa* give. The  
Didioput here make  
a very faint strid  
all these of the genus  
I have taken at  
night have a very  
similar song -  
Daytime - In weed  
field & underneath  
much sandspur  
and some other  
grass - Didioput.  
fairly common  
but somewhat local

in weeds - 2 of large  
Melanophila common

The bug graceful as  
a fly and lives  
up in the tops of the  
weeds the other more  
on or near the ground  
2 of Paraid everywhere  
common. In sandy  
region so much  
sand spurs Pieris  
common, Sphar  
occurs, Neotoma  
same. In sand  
pit & along roads  
Citrya occ. 1 Dig  
in low weed in field  
Setig in low grass  
grass in pool of  
water - The Pieris  
would often fly into  
low plants & then  
raised up. Somont

Robstown Mees Co Tex.

1 Stipator strid. on  
plants at Sta on  
July 31 and 1 Taken.  
1 ♀ on Aug 8 crawling  
on waiting room floor  
of Sta. — Well known  
in the region as  
insects frequently  
found in houses.  
The song is a  
constant, not rapid  
and faint zee  
zee zee. — So  
faint indeed that  
a much smaller  
insect would not  
be credited with  
the noise

6003 + 2 = 6005

29 Robstown Nueces Co. Tex  
Aug 9. On plain  
of clumps of prickly  
pear & <sup>low</sup> mesquite shoots  
w some joint cacti  
& other plants in latter  
ground betw scantily  
covered w. dry yellow  
grass. In mesq clumps  
no of Scaphi <sup>m. m.</sup> common  
1 heard Melanerpes  
near joint cacti  
Geococcyx costalis common  
in colonies - texensis  
only occasional in bare  
spots.

$$6005 + 36 = 6041$$

In area of shin oak  
growth of low sprouts  
thickly covering ground  
near extensive thickets  
of these trees - Brown  
Parula-like winged,  
common, occasional  
on prairie also. Very  
active and owing  
to the resistance of

The stiff oaks it  
was hard to collect  
in spite of numbers.  
Sparrow? magnificent -  
2<sup>d</sup> among these shin  
oak sprouts - weak  
fluttering flight -  
a very few S. americana  
S. lineata common  
powerful insects  
& almost always very  
shy. 1 Arctia there  
3 from tall grass & was

1 Cyclopt beaten from  
shin oak sprout.

Tomonot occas in our  
mos in rather bare  
sit. Long Oxybulba  
occasional in oak  
sprout area.

1 common Melaeoph  
in weeds. Very few  
I. citreus on bare  
sand hills region.

The Hipp. The great  
dumb things are  
surprisingly quick to  
get away and are  
almost always alert;  
their flight is however  
little over 20-30 ft  
as a rule.

$$\begin{array}{r} 3974 + 250 = 4224 \\ \text{Fla. trip} \quad \underline{1779} \\ 6003 \end{array}$$

occ. on bare ground  
in mesquite region  
1 *Asplia* in weeds  
there - *Mercuria*  
very few - but esp as  
*Asplia* - 1 *Lutacea*  
beaten from weeds  
there - *Cydopt* beaten  
from weeds in field  
All short. There  
fairly common.  
*Opeia* a few and  
*Cryptulid* common  
in low grass & much  
sand & spurs in hotel  
yard - *Elipes* very  
common along stream  
in mesquites.

$$3332 + 629 = 3961$$

P.M. 20. Torch

$$3961 + 13 = 3974$$

28 Katherine Willacy Co., Tex  
Aug. 8. Ele. 26 ft.

Sand much overgrown  
w sunflower & other  
coarse weeds - weel-  
beast common. Hyp  
saussurii in frequent  
large colonies. Hesph.  
spec. & occasional  
in some places fair  
abdt. 1 pratiensis  
2 Adrophiet. Sph  
common, mildly local  
A very few Paraid  
in green weeds -  
P. simplex common,  
locally very abdt.  
Pine yellow by 1728  
in white sand  
quelly where was  
little vegt. Polos  
fairly common. Agave  
occas. rare.

30 Benavides, Duval Co. Tex.

Aug 9. In cleared  
pasture overgrown with  
various very dry & not  
very dense weeds -  
~~Arctostaphylos~~ occasional  
Syst fairly numerous.  
Quercus same

Price same more for  
conquered to more  
sandy or loose adobe  
spots - S. crist occasl.  
common Quel. same -  
The hills low & rolling  
covered w various  
semi desert plants  
& clumps of mesquite  
& prickly pear -  
Lomelos occ. nestob  
fairly common in low  
sparse dry yellow grass  
between other plants  
on nearly bare gr

10<sup>th</sup> S. obscurus type  
10<sup>th</sup> 1<sup>st</sup> S. nigra

In opuntia 1 S. grandis  
Several of the ~~brown~~  
Stip seen - S. mitchelli  
all but one seen taken  
and csd. search reg -  
only one area of opuntia  
was found to harbor  
all of these stip -  
+ Hornilia in high  
mesquites of bottom  
lands & in sh grass  
(yellow) there in Opia

$$6041 + 95 = 6126$$

June says 95  
I say 90

P.M. W. flash. Rhinea  
rect <sup>fairly common</sup> occasional in

mesquite esp. 1 in weeds.  
Harmonia obscur in mesq.

Large brown Dectopoda  
a few - 1 stood on opuntia  
the other in mesquite on  
limb about 4 ft from  
ground - This latter  
sit seems to be a  
favorite one at night  
for the sp.

$$6126 + 13 = 6139$$

Bunawodes Aug 10 -

30

In large weedy field  
saw more Arctia  
prowot. 2/2 " V  
" - No others seen  
Arctias in small  
colony in mesq on  
edge of field and  
occs in field -  
Encyrt occs in  
open spots

$$6139 + 96 = 6235$$

500-550'

31 Laredo, Webb Co. Tex

Aug. 10. Liliaceae  
not at all common  
around edges of  
small pools in large  
arroyos. On summits  
of hills - bare pebbly  
ground covered with  
a variety of low  
thorny for the most  
pt bushes & cacti.  
Opuntia, Toumouot, Vinc  
general & fairly  
numerous. Lupinus  
occasional in one  
limited area & most  
shy very diff to appr.  
1 Diaph in bunch of  
no green grass in arroyo  
Greasewood grows in  
very small clumps at  
edges of arroyo cliffs

where there is no  
other except a very  
few just back of this.  
careful search revealed  
no Orthoptera -

In field of sorghum  
mostly cut & dry -  
many very pale.  
Sph. vagr - 1 dark ♀  
only - Sph. crust ocul  
Paraid ocul in  
weed <sup>& grass</sup> - vine fairly  
common. 1 Aristaea.  
Psoa on bare ground  
ocul - 1 Dichrou in  
short green grass in  
arroyo bottom

$$6235 + 62 + 2 = 6299$$

1 Roach Katherine  
1 Ben Hebbrowick  
Tex

Aug 12 -

Laredo - nothing prairie  
~ sandy pebbly slope

covered w mesq & other  
bushes - dry yellow grass  
between - 2 Dichopet on  
low bushes beaten & 1

Diaple ♀ - 2 cons of same  
beaten from low mesq.  
this is their favor habit  
apparently - At night  
at light 2 Tomocot  
2 Leucop 1 ♀ MusTox

$$6299 + 39 = 6338$$

Aug 12 - Laredo Tex -  
All ♀ *Lipenes* are very  
fresh - the sp. has just  
appeared - none of the  
♀ have slightest trace  
of eggs as yet. *Rhucia*  
*spicosa* found in  
mesquite about 8 ft  
high along edge of  
fields - The ♂ were  
in the terminal  
clumps of leaves  
resting on top of these  
& the *A. victoriae* (?)  
was there also - This  
latter has yellow wings  
w markings zig zag  
& is about as small  
may be an sp. - The  
♀ were found  
clinging to main stems  
just below leaf  
clusters & were very

chummy - All open  
showed long exposure  
when cut open for  
stuffing - The ♀ had  
each but a few fully  
developed eggs left.

At night only Nict  
taken 9<sup>th</sup> strid zeek  
zeek zeek violently  
with ♀ on a lower

branch in term  
cluster of leaves but  
a few inches dist.

Horvilia occurs in  
mesq also. 2 deft-  
circi melanophili on  
on two branches  
of mesquite - around  
not cordless & were

cautiously seized.  
without their knowing  
no more see the  
long & careful search

9 Asaphia in field  
of cut sorghum -  
small Paraid occur  
in joint cactus etc.  
Asaphia in drug store  
& Grill domest?  
very common in town  
& exceedingly active  
always in inaccessible  
holes in stores walls  
etc. give a sort of  
cutter strid - / of the  
large Palaud probab  
was heard strided  
in mesq a loud harsh  
Kritt Kritt Kritt.

$$6338 + 70 = 6408$$

32. Cotulla, Tazalla Co Tex  
450' Aug. 13 In brushy

area much joint cactus  
& opuntia w ground  
almost bare. Someort  
& vine common mesquite  
loc common S. paga  
2 in bushes 1 taken.

Rhabdops in low  
sandy-like bush -  
beast jt-cactus well.  
a few in joint c. can  
hardly be driven from  
these plants but when  
quickly dislodged jump  
and fly often some  
distance - In the  
cactus they can often  
be touched without  
them stirring more  
than to change position.  
All Cyclot at base of  
joint cactus found where  
it was demolished

I citr and vine common  
along R.R. on barbed  
ground. 10 Diaph <sup>Tamara</sup> on  
mess on very tip of tree  
leaf cluster - not on leaves  
w/ fore legs at parallel  
Slagued on mess.

$$6408 + 48 = 6456$$

P.M. R. vict loc fairly  
numerous - all in mess  
etc 1 in spiny plant (kept)  
A very few horn heard  
1 taken - a very few  
Stp large brown also  
heard & 1 taken 1 huge  
Cuthox taken on sandy  
road in heavy chaparral  
confused by light it  
jumped swiftly and  
vigorously but without

Set out Aug 14 on freight car at  
sta - 1 Bue in adobe sand 2 Brae  
in two thick bushes.

direction - One of  
the Paluias was  
singing diff from ever  
before - the song was  
zitt zzzzzzzzzzz  
zitt zitt zzzzzzzzz  
the contour round of the  
of ccd duration -

The large Stip sings  
quite like cert  
Dichop - a very  
faint zy zy and  
then a still fainter  
whirring sound which  
it hardly seems possible  
comes from so large an  
ins.

Cyclopt heard  
on every side thinking  
a faint chirping in  
chaparral of all kinds  
near ground

$$6456 + 8 = 6464$$

$$6464 + 7 = 6471$$

33 San Antonio Belar Co  
Tex. Aug. 15 Very

dry conditions - Rolling  
country covered w mesq  
& some other bushes  
w occurr oak motts  
no grass but ground  
covered w green plant  
very open & a foot high  
the open Sarcocolla  
occasional - vine &  
most in the colonies scarce  
Mesquite in Chert 10"  
are a fine low heavy  
green bushes series of  
Dides taken very local  
not at all common  
hard to find 1 with  
1 Antelope there - From  
Mesquite open a few etc  
1 Draper on the dead leaves  
under aalls in Cyclops 2 Lich ful  
 $64^{71} + 33 = 6504$

In high green grasses & some  
plants on level land -

Campoplex very local - no  
very common there - the series  
of ♂ & 1 recent ♀ - One  
same level land in dry  
<sup>brown</sup> green weeds 1 brown ♀ / green ♀  
There also Parai very  
scarce - 2 Step in isolated  
mesq low 3 to 4 ft high

1 Schistocerca g in weeds  
1 S. lineata resting in  
top of Huasache bush 6 ft  
high - 1 Syrph in dry weeds  
Xyph common w Campoplex  
& sh. wing Mel - as  
taken only 2 or 3 ms of  
the latter seen.

$$6504 + 42 = 6546$$

San Antonio Aug 16 - In  
river bottom of S.A. River  
among various vines &  
rather high dry grasses  
on ground M. plebejus (?)  
fairly common & Sam  
Fordyce melanoph seen  
& taken there -

On bare wet mud  
around water hole  
in otherwise dry  
stream course Elyes  
swarmed. Paratels in  
large nos both on & also  
in one spot, esp at  
head of this spot where  
back of the bare places  
were rank high green  
grasses and all  
growth of nettles  
& other green plants  
In these Artemisia  
was common & grass

to take while Trux  
was there abundant  
1 Saxifraga & 2 Hypoxis  
& very few Dichromora  
The whole country  
examined heavily  
wooded - willows &  
other trees.

$$6546 + 317 = 6863$$

34 Knoxville, Kerr Co. Tex.

1525-1725' Anemoid -

Aug. 17.

In river bottom choked w  
decid trees - Along back  
water cypress - Under  
shoots of various trees  
& vines - 1 large bare  
yellow head Decalthe  
beaten from vine  
~~1 single~~ a few ~~Habit~~  
~~there~~ - Syrb occurred  
1 unio & 1 in low  
oak on hill side about  
100 ft higher both beaten.  
1 am Bumble ~~flies~~ "  
<sup>2 sps</sup> ~~a few Cyclopt~~ These more  
numerous on ground  
among plants & grass  
& under bushes on hillside  
Short a few Ellipsis common  
& many Helig & one 1 ad

in grassy depression  
near bayou - 1 mil  
sh w texanus (?) on very  
little orth there

The hillsides closely  
dotted w trees mostly  
oaks 10-20 ft high  
Soil quite whitish congl  
broken up small  
with fragments -  
ground <sup>very scantily</sup> covered w  
fragrant plant (sawfly)  
grasses & other low  
plants - Hadrotett  
occasional, not scarce  
Sphar aeg common  
Trimer spl like fairly  
comm, found esp on  
steep outcrops - vireo  
common & very dec  
colored Sph boll  
a few in leaves  
under oaks

Anthr v scarce in  
ground veg. 1 taken  
in field at base, Mel  
traneus (?) common  
about oak sprouts  
Mel. lanceol sh. w. red  
leg occasional in  
fragrant plant (scent)  
Mel phlegius a very  
few in field weeds  
at edge.

Rhabd (?) scarce  
in ground veg more  
on than ads.

Samp dyce mel angulid  
occurs in ground veg  
& about low oak shoots  
& common in <sup>low</sup> weeds  
about last trees on  
edge of woods.

1 Amby midst in  
ground veg at summit  
llv. 1 Schistoc

There in oak

15. naga in field  
on edge of woods  
(This sit 200 ft lower  
than other Schistoc)  
on hillsides & in river  
bottom in small colonies  
I aster Mustoe caputo(?)

v. common all over.  
Hillsides esp on lower  
open slopes. Mustoe

common of locally  
fairly common in field  
a few on hillsides

Diaph a few <sup>permanently</sup> in ground ~~det~~ & ones  
in oak ~~shoots~~ - Arphia  
<sup>very</sup> a few in river bottom  
& field - upper levels  
on hillsides a few  
individ & 1 or 2 are  
colonies - great white  
much battered after

In low sparse stable  
field a very few S.  
crist, occas S. aegu  
very few M. packard  
Colonies of Hipp coralli  
(a few of these also)  
most wary  
& shy very diff to  
appr near enough to  
capture - ♂ the more  
active but ♀ flew  
farther often 100-200 ft  
Eucop tex 1; Eucop cost  
common in colonies,  
Large Chort occasional.  
Stagmo 1m in ground  
near hillside, 1 small  
lace wing Chc. there.  
On hillside a Tamo  
& a Hadro were  
taken on bare grayish  
earth & rock facing  
which taken at the

same sweep were  
indistinguishable in  
color shade & pattern.

All of the Iri bruneri gr.  
were recently emerged  
& ♀s contained no eggs

Sph. aeg much the  
same perhaps slightly  
earlier, but very little.

Hipp had been flying  
some time - ♀s had  
fully dev eggs mortans.

Arphia almost dev eggs  
and eggs almost all  
laid - much scattered

Iri citr well along  
& full of fully dev eggs  
this last sp in small  
colonies in dusty road  
about town.

$$6863 + 472 =$$

$$7335$$

Kerrville Aug 18, 1800'

On plateau - ground  
of broken limestone  
heavily overgrown  
w low oaks in clumps  
18-20 ft and about 3 ft.  
In low clumps M.  
texensis in great  
nos - Long winged  
similar esp. very few  
& local these esp.  
quickly the deepest  
bushes and were  
exceedingly difficult  
to take. M. robustus  
there very scarce  
Schisto aboluta (2)  
occasional in these  
esp. higher clumps  
Arphia carinata  
scarce near clumps  
of oaks on ground  
I belli there occasional

a very few A. mastica  
on slopes in oaks

On top in large open  
areas covered w low  
scanty grass Sph. aeg.  
very plentiful, Mesto  
common sp. abdt  
E. cost plentiful  
In rockier place  
Hadre common

Lepus in one  
good sized colony  
most wary. Hipp  
rugo & corallipes  
in small nos.

Small Mel sh w  
fairly common in  
grasses & on edges  
of bushes Hedys. spec.  
very occ in low  
oak clumps / H. prae  
there - Arph. luteola  
fairly common also

of clumps - Striped  
melanophilid widely  
distr not very plent.  
Rhabdoviscaria in  
acacia. 1 Dectuid ♂  
up in one of these  
about 1 ft from gr.  
27 in low small  
leaved long apined  
opuntia. 1 walk  
stick in yellow  
grasses at foot of  
bushes other gray one  
on lower twigs of  
acacia - The red  
winged arphia scarce  
but near luteola.  
Trim vinc common  
Tri bruneri gr only  
on rocky slopes  
occasional. A very  
few Syrb auctus in  
oaks low thickets

Boopedon very scarce  
in low grasses  
Murphya still scarce  
there. Cyclop occur

P. M. On limestone  
bed of river where  
damp & few green  
grasses larger  
Tettig common - on  
bare rock near  
beforementioned grass field  
Stelgid numerous -  
In river bottom weeds  
under trees S. admir 1  
1 Nemod - In weeds  
tall green about town  
& deep/Orch heard 1  
taber - Cyclopt in  
admir site

$$7335 + 373 = 7708$$

35 Flatoma, Fayette Co.. Tex  
Aug. 19. 475' In Tall

bunch grass w free weeds  
near post oak forest

Mercuria ~~aeft~~ abdt

Syrb adue abdt

2 sp long wing Uel comm

Ue levidus 1♂

Ue. robustus scarce

2 ~~Pseudo~~ atrig

A carinata occas

& same in post oaks

Parai occas & in

green weeds -

Quaeric fairly comm

2 Stipator

In green weeds in  
low spot Campyla

♂ occas abdt

A. Neast comm

In open cleared

w low scant veget

H saessurei common

in colonies.

Arphia litt fairly  
comm.

Psie 2 sp no? fairly  
common locally  
Mesoc abortiva occur  
2 chunky Orchelimum  
in post oak & low branch  
8 ft from ground  
near top about  
12 ft high. I tried  
not bud but of  
much same as comm  
sp. Stagmus no  
occs in much grass.  
1 ad & strictum no  
occs in same

7952

7708 + 244 = ~~7952~~

Shalonia Aug. 20. In  
stream bottom filled  
w live oaks & various  
other hardwood trees -  
the dense underg. vines  
& weeds U. linearis common  
a few C. antill, H. aff  
occas. mailed Parais  
frequent In bushes  
& tall green veget  
weeds etc on edge  
Sch obsc common  
a few Sch in weeds  
& bushes - H. aff. spec  
very common in green  
weeds like Rosenberg.  
In bunch grass  
beside n.r. series of  
Pseudos taken w  
much beating, there  
near post oak thicket  
a very few Arch.  
cristata in weeds

max road at  
stream bank

1 Hipp. texensis  
In dusty weed every  
field M. atlantis &  
other long wing of  
fairly numerous  
a few Pine There  
in weeds of field  
on edge of bottom  
woods M. plebejus  
occasional.

$$7952 + 170 = 8122$$

36 Walde, Walde Co., Texas  
Aug 21. 1000-1100'

In wash filled with fairly  
high green weeds & some  
vine tangles with high  
mesq and a few clumps  
of oak - ~~Campyl~~ common  
in tall green weeds  
great Diaph swept there  
1 Aratiles on " " "  
and one on "sensative"  
leaf miniosa on slopes  
other Diapher <sup>persim.</sup> 2 in tall  
green weeds all others  
from hill slopes on  
"sensative C" miniosa  
M. glaucipes common  
everywhere.

A few Syrb fusc in  
bottom

♂ & ♀ Dido from tall  
green weeds there, all  
others on "sensat. l"

*miniosa* on slopes  
2 *Arcthaea* on grass  
weeds in bottom.

~~*Rhabdot* rather common  
up on "sl" mine on  
slopes~~

~~3♂ 2♀ Cleft worm helps  
on very green "sl"  
*miniosa* about 3 ft  
high.~~

A very few *Asphidia*  
in bottom.

*H. corallip* scarce  
widely distr.

*I. agilis* common  
widely distr.

*I. vire* occas, sand.

*Cyclopt* common us  
in low plants &  
on ground.

*Hoploph* us found  
in rats nests.

A very few S. naga  
on slopes.  
Same site on "s l"  
ominosa Palmeria  
occasional - largest ♀  
in green weeds in  
bottom. As sun  
began to appear horizon  
at 5.30 this sp. began  
to sing faintly in  
the bushes.

Stip. large sp. on  
Opuntia and in vine  
tangles in bottom.

Stip. mitchelli fairly  
common under "s l"  
ominosa on slopes - 2  
in Dasylirion and  
a number were in  
a rats nest.

Murnia scarce on  
slopes. M. texanus  
a very few in bottom.

P. M. Arvicula heard  
common in mesq  
trees after dark - later  
few stridulating 10 P.M.  
1 taken. Neurobis  
common in sand-spur  
grass and a series  
easily taken w flash

$$8122 + 253 = 8375$$

Uvalde Aug. 22 At Yellow  
Water Hole - Scutigera occur  
along mangroves - Very  
common at upper end  
in green weeds at stagnant  
waters edge - Saw open  
rats nest - Hoplosphy  
alone - no occasional  
no adults.

$$8375 + 140 = 8515$$

37 Del Rio, Valverde Co. Tex  
Aug 22 Elevation 900 - 1000' 970'

In Rio Grande river  
bottoms - In area  
of heavy grasses with  
clumps of cat-tails -  
S. americanus occasional

~~Xiph.~~ common.

Arch. occasional.

In cat tails Lepidosperma  
occasional.

Dichromis  
fairly common

The sandy soil near  
river overgrown with  
willow - a few M.

herbaceus and 2 or 3  
S. obscura (latter not  
taken) Back of  
this area of sunflower  
& various weeds on  
similar soil -

M. herbaceus occasional  
in spots fairly abdt  
1 M. phlegicus

<sup>1</sup> once scarce.  
— most locally not-  
scarce.

Along roads S. curvica  
occured (A few of these  
were seen at Walde  
station this morning)  
On bank of river wet  
soil at waters edge  
/ Lettingid.

$$8515 + 38 = 8553$$

might at light. vestib  
in large nos. ~~Dryllus~~  
~~black~~ occured Dryllus  
personatus scarce, a few  
Leprus & Eucrypt, 2 Corbia

Del Rio Aug. 23 Ele 1000'-1100'  
On rolling hills covered  
w low "sensat leaf" minosa,  
various low thorny desert  
bushes, occas yucca &  
opuntia 2 sp. 1 Hippuris  
1 Acaoloph 1 Lepurus 1 Rhura  
spumosa, 2 no Rhura  
Rhabdotett 2 sp? in  
"sl" minosa - All  
Rhurias there ♂ & ♀  
vectorial in one bush  
vine general decub.  
On edge of water  
hole a few Scutiger  
& very few Elliger  
In green weeds above  
this 2 ♀ M. herbaceus  
a few C. campyrotata  
& Dichopelt in cat-  
claw & other thorny  
bushes -

In low area under  
mesquites, green  
weeds, vine tangles &  
some grass. Th.

glauces fairly abdt  
Purvi some a few  
cyd (i), Apia in  
grass not common

B. Tamar  
Paratilis in bush  
not common Stip near (dark wild fig)

Stip multicelle in  
about 2" near on  
high ground.

Parabae in small  
tufts of on the grass  
There

$$8553 + 207 = 8760$$

38 Langtry, Valverde Co Tex.

Aug. 24 Ele. 1050' - <sup>1550</sup>1325'

1309'

Limestone slopes, flats  
& hills - rounded. Ground  
bare broken up limestone  
dotted with Robert species,  
Covillea, Opuntia, Lecheguilla,  
Dasyleron, Fouquieria &  
various other desert  
plants.

Vine occlus genus  
slate 1200' - 1550'

✓ S. vaga on quartzite edge  
1250'.

✓ Boottia no few, scarce  
ads very rare on  
granite 1300 - 1475'

✓ H. andrus 1400'

H. few Mestob in one  
small area at 1400' -

H. few Mesto apito l? ,  
scattered over <sup>some</sup> slope at  
1400' - 1450' ~~in~~

1037 D. longipennis  
at 1300-1350' on level  
places.

1 m Diaple on mesquite  
1300'

~~Cyclot  
not very common in  
Rancho neg. (1750')  
8110 Fraxinus & on  
mesquite at highest  
edge (1450')~~

~~10<sup>8</sup> Acrocara angulifera  
on the same bare slope  
of limestone fragments  
about where all adult  
Boottellia were taken  
1450' - It flew a short  
distance where a first  
unsuccessful attempt was  
made to capture it;  
then easily taken~~

$$8760 + 34 = 8794$$

39 Sanderson, Terrell Co. Tex.  
Aug. 25. Elev. 2750'-3180'

(2800')

On flats covered heavily  
w bush (a sample kept),  
some occasional greasewood  
& mesquites & often  
much joint cacti -  
Thorned almost bare  
widely scattered tufts  
of <sup>low</sup> grass - The stark  
bare ground shows  
into mesquites.

in greasewood many  
ms & few as hostilis.  
In grassy areas  
Ligustrum very common  
& their, whisp. & find  
whispering to be. on  
on every side - They  
are common on  
apt to be. on  
more on on  
about

usually  
alighting in another  
bush but frequently  
on the ground, from  
which latter place  
they invariably spring  
into a nearby bush  
with astonishing speed.  
The note produced  
by this species is  
much louder and  
more rasping than  
L. cog or benzoni.

Acanthreus on same  
flats in tufts of grass  
in joint cactus (where  
cows could not get at  
the former). In all 4  
were seen in such sit-  
2800' - one was taken  
in grasses near summit  
of cliffs in a m at 2925'  
no others seen there

2 sps

~~Cydopt~~ fairly common  
on figuro bush and  
in moder sps on  
greasewood - not  
scarce in dry water  
course in cañon on  
"nevada" bush Adiantum?  
and ocoul on hillsides  
2750' - 2950'. Black brush  
Flourensia cernua

I. runc fairly common  
on flats cañon botto  
and musas 2750' - 3180'  
Green & Allophus taken  
but lost on "cat-claw"  
on flats 3800' Cercis &  
Supra oval phaps  
deeply cleft. Legumin  
rounded, almost black  
with whitish veins  
1 mel bodichei gr &  
figuro bush 2800'  
In sotols & grasses  
nearby in bed of

2500' - 3000'

water course down

center of cañon

and on steep slopes  
in similar surroundings.  
*M. texana* sp. scarce.

*Syrbula* in grasses  
at summit of a cliff 2760'

In slopes in varied  
vegetation of acacia,  
lecheguilla, various

low desert bushes  
& plants, & widely  
scattered groups of  
stunted oaks! Better  
on higher slopes!

15' 15" *M. robusta* 2900'

In low grasses &  
plants in the same  
bed & the slopes.

*Parabac* fairly common,

2 *Parabac* in a row  
us of *R. lamprocarpa* in green  
plants & bushes & 10' in *Calceolaria*

Are pebbly bare,  
alluvial fan at  
mouth of cañon a.  
myrm very scarce-  
all in one small  
area 2800'. Over  
slopes of hills I. yucca  
occurs 2800' - 3180' -

1 S. raga ✓ 3180'  
1 Stip near mitis  
in total at 3180'

~~Forked cerci / melang~~  
~~in bushes and esp in~~  
~~sotals on hillsides~~  
~~& on mesas 2800' - 3150'~~  
~~occasional.~~

I. praecox occasional  
on bare rock fragments  
on hillsides, & also  
bare spots on mesa,  
former place occurs  
latter very rare.

2850 - 3180'

Prolocera on flats!  
& on mesa 1, 2750'  
and 3180'.

Strap on flats 2750'.

Mesobry ferrielle sp.  
common on lower  
gentle slopes of alluvial  
fans and on slopes  
& mesa in a small  
mos. 2750' - 2950'

1 D. longipennis on  
mesa 2750'.

B. bolli - a very few  
in the small clumps  
of oak thicket on  
upper slopes 2850' -  
2950'. A few little  
brownish of Proctos on  
Adiant! & 5 D. longip  
on hillside. 1 on D. longip  
on Adiant in dry etc. hill.

$$8777 + 201 = 9055$$

Sanderson PM Aug 25

On flats - Only

electric heard 1 R. victoriae  
on adumbrata - Very  
timid & takes w great  
diff. Figero strid as  
frequent as in day time  
but not as loud -  
moonlight night?

# Warning

Watch labelling  
B Stenopleura mix  
Some Marathon  
mat. (1 ♂, 3 ♀) was  
labelled  
Pterocites etc.

~~with~~ Some Mayaguez  
Ranch (13 ♂, 4 ♀)  
was labelled  
Marfa



# Numbers Great Bend Region

- 1 ~~Idem~~ ~~Idem~~ ~~Idem~~
- 2 ~~Stagnone~~ ~~lumbata~~
- 3 ~~Redosone~~ ~~tenus (?)~~
- 4 ~~Great~~ ~~Diapheromera~~ = *n. mesillana*
- 5 ~~Boettleria~~
- 6 *Syrbula* *admir*
- 7 " *fuscovitt*
- 8 *nummiva* *utana*
- 9 " *ovitt*
- 10 ~~Acrolyte~~ *variegatus*
- 11 ~~Acrocera~~ *maculifera*
- 12 *Opeia*
- 13 *Boopetou*
- 14 *Ligustilla*
- 15 *Amphibia* *crassa*
- 16 *Hippisus* *corallinus*
- 17 " *reddish wing* *regosus ??*
- 18 *Lepus* *whelleri*
- 19 *Lomonotus* *agilis*
- 20 *Dactynotus* *haydeni*

- 21 *Mustobreg rubripes*
- 22 " *rough broad winged*
- 23 " *delicate "capito" (?)*
- 24 *Striaphura*
- 25 *Aulocarya femoralis*
- 26 " *refusa*
- 27 *Agrotettix aeneus (?)*
- 28 *Tropidolophus*
- 29 *Trimerot viriculata*
- 30 *Trimerot near <sup>crumby hill st</sup> macchana*
- 31 " *speckled large*
- 32 " *latic gr. so. v.*
- 33 *Hadrotettix 3-fasc*
- 34 *Brachystola*
- 35 *Hesperotettix viridis*
- 36 *Campoplex near regana*
- 37 *Rhabdotettix (?)*
- 38 *Melanoplus forked arcs*
- 39 *Melanoplus near aridus*
- 40 " " *regalis*
- 41 " " *boudettii*
- 42 " *like atl - broad single*  
*inside fine*  
*red*

- 43 melanopleus laticornis
- 44 Photaliotes rubescens
- 45 Dactyloctenium n. sp.?
- 46 Dichopetala?
- 47 Reimia spinosa
- 48 Styrator near mitchelli
- 49 Atilopus mottled
- 50 ☒ Onocophalus strictus
- 51 Hyllus slender dark bar face
- 52 ~~Phyllobotoma~~ 4-maculata
- 53 ☒ Cycloptilum squameosum
- 54 ~~Demetrium~~ 4-funct
- 55 ~~Prodosomy~~ toothed back
- 56 ☒ Anthracia
- 57 ☒ Anthracia carita?
- 58 Lepus cyaneus
- 59 Spharagemon bolli
- 60 ☒ Ferrima solitaria
- 61 ☒ Eutettix variabilis
- 62 ~~Dumeretionus~~ cyaneipennis
- 63 ☒ Parabacillus coloratus
- 64 ~~Rhabd. d. palmeri~~ Cyclocerces? striped mel.
- 65 Phrynotettix verruculata

- 66 *Dichopetala* 11 ♀
- 67 ~~*Aphyia*~~ *Townsendi* re (
- 68 *Hypochlora alba* (
- 69 *Mustobezus obliterata*
- 70 *Hoplophrys borealis*
- 71 *Helicostus benjamini*
- 72 *Cecanthus yellow-head*
- 73 *Trimerot-mar* *praeclara* <sup>wid.</sup> wing bl
- 74 *Melanophus rotundus*
- 75 ~~*Cordillarius*~~
- 76 *Trimerot* near *Cati* <sup>marrow</sup> wing band (
- 77 *Mustobezus* short <sup>suff. ends</sup> of wings
- 78 *Melanophus* near *Merbaui*
- 79 *Trimerot* *latimunda*
- 80 " *albica*
- 81 *Proponeura pallida*
- 82 " *wyomingensis*
- 83 ~~*Sandropoda*~~
- 84 ~~*Acanthopoda*~~
- 85 *Allophus* (common)
- 86 *Hemiphaedusa* *viratula*
- 87 *Trimerot* *lexana*
- 88 " *strimma*

- 89 *Myiobus caribaeus*?
- 90 *Scolecophagus* sp.
- 91 *Phrynosoma marmoratus*
- 92 *Paracryptus* ~~palmeri~~
- 93 ~~*Calamagrostis*~~?
- 94 *Cnemidophorus carolinensis*
- 94 *Stegonotus* small
- 95 *Salsola linearis*
- 96 " *vaga*
- 97 *Amphispiza bilineata*
- 98 *Rhabdophis palmeri*!
- 99 *Melanophrynus regalis*
- 100 *Encyrtus costalis*
- 101 *Aligona*
- 102 *Melanophrynus packardii*
- 103 *Phrynosoma marmoratus*??

56 = 57 ; 32 = 79 ; ~~50 = 76??~~;

46 = 66? ; 22 = 69???;

at least 100 sp  
for region



See 53

40 Marathon, Brewster Co.,  
Texas, Ele. 3940' - 4160'

Aug 26.

- 1 ~~very few 2♀ 1m on~~  
~~rocky soil between bushes~~
- 2 ~~1♀ 1♂ only in~~ bushes
- 3 ~~Common on plain~~  
~~in rabbit-weed & grasses~~
- 4 ~~*D. n. missillana*~~  
~~very local, common~~  
~~in high grasses in one~~  
~~damp spot.~~
- 5 ~~very common in~~  
~~grasses - sometimes 7~~  
~~or 8 in one small bush~~
- 6 ~~very scarce in same~~  
~~place as 4~~
- 7 ~~in grasses and bushes~~  
~~on hillside - occasional~~
- 8 ~~very common on~~  
~~hillside esp toward~~  
~~top~~
- 9 ~~very common everywhere~~  
~~on plain where high grass~~

\* = SEE 63 re adult data

10 2♀ only in grasses on  
hillside among bushes

11\* 1♀ in sparse grasses  
on rocky soil near middle  
of plain

12 fairly common wherever  
tall grass grows

13 Scarce in grasses  
on plain & hillside

14 common in same bush  
as at Sanderson which  
here grows scattering  
on lower levels of plain  
and very scantily on hills

15 occurs on hillside to  
plain

16 1♀ as 11

17 1♂ (1 other seen) as 4

18 a very few as 11

19 one ♂ " "

20 a few about before on  
adobe almost bare

21 very common among

\* Sub 3 re addet data

— bushes and grasses at  
Top of hill and a few  
down to its foot

22 on rocky soil near  
middle of plain scarce

23 fairly numerous as 21

24 1♂ 2♀ on rocks  
among bushes and grass  
at top of hill

— 25 in ~~great~~ nos all  
over plain & up to  
hill top

26 not scarce locally  
as 22

27 ~~Abund~~ everywhere

28 one on all colony  
as 4

29 common about Town  
on ridges etc only

— 30\* on rock outcrops  
on hill among few  
bushes in fair nos

- 31 as 22 not abundant  
 32 on bare above  
 spots in plain around  
 by high green grasses  
 33 very common on  
 hill slopes esp near  
 base and common on plain  
 34 1 on hill slope  
 35 27 in rabbit & on plain  
 36 fairly common  
 wherever grass grows  
 rarely in deep spots  
 on plain  
 37 38 in ~~✓~~ bushes on hill  
 38 in ~~✓~~ great ones on  
 bushes on hill & in damp  
 wet common on plain  
 39 common in ~~✓~~ rabbit  
 & grasses in damp spots  
 very local  
 40 a few in green <sup>damp</sup>  
 grass ~~✓~~ on plain  
 41 much as 40 <sup>& in rabb</sup> & <sup>& in grass</sup>  
 on plain

42 same as 40

43 a very few in one spot as 40.

44 common in grassy (high green) areas on dry plain.

45 in rocky slopes of hill on <sup>bare</sup> ground between bushes & grasses  
♂ & ♀ in situ

46 not only not <sup>44</sup> occur in much as on <sup>low</sup> weeds in same

47 in acacia & sweet flower bush on upper slopes of hill occur all seen captured

48 occur as 47 but on ground & also one or two in ~~brush~~ small areas of tall grasses on plain

= See 63 re addit data

49\* widely distributed  
everywhere on plain  
& hills - usually on  
ground among low  
grasses & plants but  
found in high grass  
areas on plain, in <sup>small</sup>  
vine tangles in wet spots  
1 in thorn bush 1 in  
greasewood & 1 in liquor  
bush

50 very scarce in high  
green grasses in wet spot

51 on ground as 50

52 not scarce on  
plain & hills in low  
green grasses.

53 on ground & in liquor  
bush on plain (25)

54 in grasses in dry  
spot.

55 in liquor plant 1 ♀

$$9055 + 600 = 9655$$

Marathon Aug 27

6. not so scarce - occasional

7. a very few as 6 also  
8. 2 seen on plain far  
from hills

28 along RR also for over  
100 yds seems to prefer  
places where there is  
tall grass w small spots  
of bare ground - Almost  
always alights on ground

29 a very few out on  
plain in poor spots

30 a very few also in  
places strewn w rock  
fragments on plain

32 local acc in ced  
columns - flies with  
a peculiar low swift  
but fluttering flight

38 scarce over most  
of Maine however

56 very scarce in  
one area only of high  
green grasses intersp  
with various other plants

$$9655 + 240 = 9895$$

41 / mts near Maguire Ranch.  
Elev. 5600 - 7000 ft. Aug. 29.

Jess Davis: C. L. Davis

8 common on mountain  
sides in ~~for~~ high bunches  
of grass from ~~to~~ 5800' up.

12 common in grass at 7000'  
a few on lower slopes  
down to camp

19 occasional on rock  
outcrops esp. near grass  
up to 6500'.

21 common almost, widely  
dist. over mountain  
slopes from 6400 up.

23 very scarce up to 6500

24 fairly numerous in  
grassy spots from camp  
up - up on hill tops

"frasturus" at about 6600'

25 very scarce indeed  
up to 7000' where ads are  
were taken.

27 a ~~very~~ few - almost  
all in "pasture" country -  
near 7000'.

29 fairly common in  
bare spots near stream  
at camp - 1 ♀ at 7000'

34 very scarce on  
north slopes near grasses  
♂ ad at 6900'.

38 1 ♀ on ~~bare~~ rocks  
near bushes at 6250'.

45 1 m on north slopes  
6700'

48 1 ♀ seen in *Yucca filamentosa*  
at 6600' & 2 ♀ in long  
spruce sprouts at 6750'.

52 m only ~~seen~~ near summit  
at 7000'

53 1 ♀ n at 7000' beaten  
from grasses under oak  
(see page 18)

57 1 ♀ m in bunch of  
high grasses at 6750'

58 not scarce scatt.  
over entire slopes from  
5800' to 7000'.

59 occurs about clumps  
of oak (referred to in 53)

60 yellow at 5800' on bare  
rocky <sup>fragm</sup> slopes dotted

with scattered bunches of  
grass & a few oaks

not uncommon in  
"pasture" on ground  
among grasses at 7000'

61 from camp to summit  
very scarce indeed in  
grasses - or very small  
not extra scarce.

62 a very few on rock  
outcrops at 6200' to 7000'

63 not extra scarce in  
grasses esp in fracture

at 7000' - from 6300' up

64 a few <sup>smaller</sup> wilder plants  
along ~~rock~~ near camp.

and very scarce in  
such places (which  
are also scarce) to 700  
ground usually grassy  
is practically no plants  
65 2♂ only at 6800' as 60.  
66 1♂ in crevice of rocks  
among very scant plants  
at 6550'.

67 1♂ on rock among  
grasses at 6500'.

68 1♂ in ~~the~~ near  
spring of white sage at  
6000'.

69 scarce in pastures  
about camp.

70 1♀ under board  
mailed to cat (no. 53)  
at camp.

$$9895 + 200 = 10095$$

1<sup>st</sup> M. Aug. 29 at Maguire's  
& down cañon - Upper Sonora

71 common in colonies  
among boulders & gravel  
in middle of wash &  
also sometimes in green  
plants on boulder ground  
along edge of wash.

57 ♂ & ♀ under oaks in  
valley bottom among  
sparse plants & very  
few oak shoots etc.

7 1 ♀ at 5700' in green  
plant under oaks on  
hillside 1 ♀ 5600' similar  
place but in valley bottom  
70 series found under bare  
bark on ~~allegator~~ bark  
juniper

59 occurs under oaks  
in valley bottom

At night same day  
about Maguire's.

Cheanthus 72 abdt in  
oaks - song a monotonous  
incessant tree-tree-  
tree-tree with no varied  
Hoplosphy? in fair nos-  
singing in stone walls  
& about boulders esp-  
almost identical with  
H. signatus - a  
nervous quick throaty  
chirp. High pitched  
53 not very abdt but  
not scarce - in clumps  
of oak shoots - song  
ze-zee ze-zee ze-zee  
usually 3 times - rather  
one - The insect runs  
about or up and down  
the branches nervously  
and every few seconds  
stops and raises its

wings giving the high  
pitched tinkling note  
which is very loud for  
so small an insect.

like a few in any sort  
of plant bush or tree  
climbing gingerly about  
and giving very occasionally  
its faint hissing stridal  
which can scarcely be  
heard at a dist greater  
than 6 ft.

69 occasional in open  
spots in wall covered w  
low green grasses -

This beautiful region is  
much the same from  
5000 - 7000' - The valley  
is quite filled with oaks  
, with occasional alig bark  
juniper and pines,  
underneath there are  
very few bushes but

almost everywhere  
much green grass.

The hillsides are not  
like this but the trees  
are much more scatt  
& the grass is higher  
& grows more in bunches  
otherwise there is pract  
no difference.

$$10095 + 121 = 10216$$

Aug 30 in pasture up Tinaja  
Cañon about 5800' *Nustob*  
*oblit* - common 10 *Trinero*  
pract gr wide way to B.

$$10216 + 27 = 10243$$

42

Forest of Pinus ponderosa  
at 7500' ft on n slopes  
of mts running up to  
Invermore Peak, Davis Mts.  
Aug 30 All in abdt-  
green grasses & great var  
of Canad Zone appearing  
plants.

64 common ~~veg~~ and  
by far the most abdt  
sp on these mts on the  
slopes from 7000 to summit

51 one fine ♂ at 7500'

60 scarce in this vegt-

62

$$10243 + 13 = 10256$$

43. ~~Mount~~ Livermore Peak  
Davis Mts. Jeff Davis

Co. Tex., Aug 30, 1912 Elev.

8382 ft. Nothing on terminal  
rock peak - In rank green  
grassy spots filled w many  
flowers all orthogr were  
taken except Cycloc(?) which  
was also common in the  
dense thickets of scrub <sup>brush 6 ft to 3</sup>  
oak - Allg bark juniper &  
junior the only trees -

25 12 in ~~pasture~~ at 8000'

27 a very few at 8200'

& below in fractures

34 1 in at about 7900'

74 no record about  
scrub oaks no heavy  
weeds on upper edges of  
meadow spots up to  
8200'

52 a very few up to  
8200' in fractures

59 1♂ at 8000' in  
oak thickets

60 3 *Gysneria* in grass  
in meadows at 8200'

63 ✓ as 60

61 ~~✓~~ in meadow  
at 8000'.

62 a very few in  
rocky spots on slopes  
up to 8200' - (taken 8-8200)

64 ~~common~~ - The only  
sp. so at 8200' both in  
sunny oaks & meadows  
not a trace of difference  
between 8200' elevation  
in these spots & the  
hillsides near camp -  
The many wild flowers  
gave a deceiving app.  
of canal or at least  
transition zone

$$10256 + 38 = 10294$$

44 / Foothills of Puertacelās Mt  
Presidio Co. Tex., Aug. 31, 1912

Elev. 5100-5200'

75 common in ~~top~~ grass on  
hillsides

66 on pebbly spots of hillside

35 one in green grasses near  
water.

76 on rocky ledge at top of  
hillsides.

20 on bare adobe wash

$$10294 + 46 = 10340$$

45 / Lower Lujánia Cañon,  
Jeff Davis Co., Tex., Davis Mts.

Aug 31, Elev. 5150 - 5250'

2 dichopet. 1 on waggon cover  
in a.m. at Maguerras (The  
more decayed) other in dwarf  
walnut in canyon at 4900'.

73 2 only on green low  
grass slopes -

77 2 as 73

All others on the same  
green low grassy hills which  
are really foothills of Blue  
Mtns etc - 78 in "arrow weed"? or  
"gold yellow"? seeds in pods double ~~one~~ <sup>two</sup>  
in wash with dichopet.

$$10340 + 39 = 10379$$

All Pinus woods in  
small dwarf walnut  
trees in wash at  
4900'

46 / Marfa, Presidio Co. Tex.  
Sept. 1. Elev. 4650 - 4750'.

79 in colonies among  
washed places along  
edges of heavier grass  
in valley bottom.

73 in fair not same  
place as 79 but not in  
colonies

75 common in low  
green grass. all over  
prairie etc in heavier  
grass

71 in grasses in wash.

80 1♀ in muddy road.

81 in grasses on hillside  
and esp. in <sup>about</sup> *Quercus* ~~floridana~~ <sup>the</sup>

82 very common in low  
place with *Myrica* ~~gale~~  
grasses.

One *Drosophila longipennis* ♀  
not taken - others seen  
at 44.

10379 + 277 + = 10656

1 ♂ Gamopoda and 1 ♂  
Campylacanthia in  
separate paper -  
2 in n. Ridge Spring  
Brewster Co. Tex. Both  
in bottom of basket  
draw - Sept 2.

$$10656 + 2 = 10658$$

See 67.

47. Tardus Sprung,  
Brewster Co. Tex. Sept. 2.

83 fairly common on  
hillsides and down  
near streams in cat  
claw & densely cheering  
over the ground between  
brush. in mesquite  
etc.

84 a very few in  
grasses growing  
under bushes near  
stream

Suif Melacopha  
long w. in bushes  
along stream fairly  
common very shy  
& hides in bush  
quickly

In grassed  
area nearby Boat

occasional. Tigrit

fairly common in  
black brush

10658+68=10726

See

3160 71

48 / Hackberry Creek,  
Big Bend Road,

Brewster Co. Texas. Sept 2

Low plain covered  
w/ cut grass, black

grass, mesquite

& other desert plants  
with - Sagino common  
over plain. Wind

very strong day

& hot at night.

Boat seen on

gravelly at night.



P. M. Sauer.

47 a very fine young  
 specimen in very many  
 large bushes 1st taken  
 from W. side of 15 ft  
 from ground. Their note  
 is very like victoria  
 but much sweeter &  
 more frequent. The first  
 Razit Razit Razit.  
 Razit.

85 Three found on  
a small house, present  
at present. a very  
short kind 1-2' tall  
or found on just  
high ground along  
edge of water on "romero" bush  
by green sublycophylla  
LST.

at night - all men  
take following

St. californica

2. 40<sup>1</sup> ✓ I was with  
86. 38 ✓

In this area after  
dark Cyclophilum  
& Hypophy were  
heard on the bushes  
on the plain in  
numbers none of  
the latter taken.

$$10726 + 23 = 10749$$

See 60

2725 ft.

49 Double Windmill,

Braceville Co. Tex Sep. 3.

Very low on edge of  
valley wash from San Angelo  
not at their extreme  
extremity -

87 mound on bare adobe  
between <sup>some</sup> turned desert  
bushes - a few found  
on bare adobe wash  
between similar bushes  
2 mi. N on Boquillas  
Road.

88 very surface mound  
ditto as ~~not~~ 87 only

10749 + 47 = 10796

See 59

3000/8

Persimmon Gap, Sep. 3

50! desert species of  
very much brownish  
dark oak covered  
leaves with green  
some small leaves  
a few tufts of grass  
nothing common  
in view.

Myrica Texana in  
few on hillside  
never green before.

10796 + 8 = 10804

51/ Belgian Dry Jack and  
Mulbox Jack Sept 4

Barren wash dotted  
with sun balled black  
brush greasewood etc

$$10804 + 8 = 10812$$

2 Avery Cañon <sup>Sept 4</sup> ↓

1 L. texana Tomillo Wash

4 Small Sp. - in cañon  
wash - will in green  
plants willow like Dec.  
mbs.

$$10812 + 7 = 10819$$

52 / Dog Cañon Sep. 3  
Brevoort Co. Tex -

~~Hornelia common in  
mesq and other bushes  
& attch to light also  
Stagnum & Lilae -~~

10819 + 11 = 10830

53 / Bat's Neville Sps. &

Government Sps. on long

slope of Quins - Sept. 5.

Ele. 3600 - 3800' ft. much  
yucca, lechuguilla, greases  
etc w a little grass on  
bare adobe between.

$$10830 + 33 = 10863$$

Sep 8 / Parapimela

3700' in grasses  
under desert bush  
others seen as far  
down as Neville Sps

54/ moss will Chisos Mts  
Tx. Sept 5, 6, 7, 8 From

4500 - 5000'. Hillsides  
& higher ground covered  
with high grass, much  
scattered some large agaves  
and lecheguilla &  
many bushes along  
the water courses  
with numerous  
groves of low oaks  
along sides of foothills.

1 a few on steep ground  
on hillsides up to 5000'

2 1/2 at night climbing  
a road toward plant  
to junction of road 4800'

7 a very few about  
bushes in valley water  
near 4500'

8 scarce in grasses  
on hillsides (acc. to)  
but great numbers

- 12 occurs in grasses  
in valley & on hillside  
4500-5000' no abdt-  
21 a very few on  
ground in valley &  
on hills (see 55)  
23 scarce in valley  
24 on hills 4800'  
34 a few no in area  
of green woods on hillside  
at spring 4700'  
38 fairly common in  
bushes at all elev  
39 same  
41 (?) a few in stream  
wash in valley & in  
as 34.  
43 very scarce as 34  
46 fairly common at  
all elev in bushes  
woods & grasses  
48 occurs as 34 and  
on hillside (see 55)

57 rare in grasses & hillsides 1 in valley wash at 7000'.

58 common on hillsides (see 55)

59 scarce about camps (see 55)

61 37 at 4800' in short grass "pasture"

63 2 only at 4600-4800'

64 very scarce as 37 (see 55)

74 (?) on hillsides in scrub oak no dots =

83 on hillsides a few at 4700-5000' (see 55)

30(?) a very few on arctic hillsides 4700-5000'

89 a few in grasses - 2 attr to light - chiefly under short succin

91 10 at 4500' in valley on rocky ground among grasses 1 & 34

92 This species is everywhere  
on hill-sides from 4700'  
up in low oaks (15-25' high)  
and at dusk began their  
incessant song which  
could hear the night.  
It consists of a single  
rushing <sup>quick</sup> ~~quick~~ repeated  
incessantly & deliberately.  
Am <sup>one</sup> startled into going  
this note early in  
the afternoon by hearing  
a rifle fired over the  
canyon. They are in  
the trees usually near  
the lower branches perched  
up on the twigs among  
the leaves - very hard  
to locate but will  
begin song again if  
one keeps still under  
them a few minutes.  
When appr they

invariably jump  
down into space  
(unless quickly seized)  
and upon hitting the  
ground at once begin  
to crawl away in  
search of safety - When  
seized they often utter  
their note in a irritated  
way.

$$10863 + 154 = 11017$$

5. slopes of Lost Mine  
Peak, Chisos Mts., Tex.

Apr 6. 5000 - 7500' No  
difference is found in  
Arct. The vegt in the  
cañon bottom & up the  
narrow water courses betw  
the upper cliffs is decid  
trees thickly packed, mostly  
red? oaks - On the

hillsides there is  
much oak brush &  
open places of high  
grass - Above 7000' there  
are various junipers,  
pines etc. on the crags  
& stony ledges w a little  
Canadian appearing low  
plants - At this height  
only on the sun were  
~~*D. pumilata*~~  
Diaphor. *Mesobrya rubripes*,  
*Hel. robustus* (?) & *Sph. coll.*

5. slopes of Lost Mine  
Peak, Chisos Mts., Tex.

Aug 6. 5000 - 7500' No  
difference is found in  
Arct. The vegt in the  
cañon follows & up the  
narrow water courses betw  
the upper cliffs is decid  
trees thickly packed, mostly  
red? oaks - On the

Hillside there is  
much oak brush w  
open places of high  
grass - Above 7000' there  
are various junipers,  
pines etc. on the crags  
& stony ledges w a little  
Canadian appearing low  
plants. At this height  
only on the sun were  
~~*D. pumilata*~~  
Diaphor. Mesobrya rubripes,  
Mel. robustus(?) & Sph. pall.

5/ slopes of Lost Mine  
Peak, Chisos Mts., Tex.

Apr 6. 5000 - 7500' No  
difference is found in  
Ariz. The vegetation in the  
canyon bottoms & up the  
narrow water courses betw  
the upper cliffs is decid  
trees thickly packed, mostly  
red? oaks - On the

Hillside there is  
much oak brush &  
open places of rough  
grass - Above 7000' there  
are various junipers,  
pines etc. on the crags  
& stony ledges a little  
Canadian appearing low  
plants - At this height  
only on the sun were  
~~*D. pumilata*~~  
Diaphor. *mesolepis rubripes*,  
*Hel. robustus* (?) & *Eph. pall.*

3 on rabbit wood "very  
scarce up at 5800'

~~D. fumosata & longicauda~~  
4 a very few all way  
to summit

8 common from 5500 up  
to 6000' a very few  
up to 7000'

15 1♂ at about 5700'

21 not scarce on  
hillsides up to 7000'

1 fine orange wing ♀  
at top.

30 very scarce as  
yesterday up  
to 6500'

38 none seen above  
6000' not common  
above 5000'

39 a few up to 6000'

48 up to 6000' scarce

59 common in oak brush  
on hillside & 1 in oak  
clump on summit

66 A few in plants  
up to 6000'. as note at bottom

74 very common in  
oak brush up from  
5500' - 6500' a few on  
summit.

83 1 ad ♂ at 5500' a  
few on hillside up  
to 6000'

90 1 in bushes at 5800'

$$11017 + 91 = 11108$$

P.M. (54)  $11108 + 11 = 11119$

Small morua like sp.  
from gooseberry wild  
at about 5800' elev.  
on mtn side.

✓ 1 at night in Aulima sp.

heard at  
night  
not  
seen  
before

Dichopt note zip-a zip-a

zip-a zip-ip-ip-ip - Sisking  
substant The last given only  
occasionally & very rapid

4600 - 5000'

56 / Canon back of  
Pullman Bluffs - Sep. 7

Canon of narrow gully  
was edged by low oaks  
& few thickets of same  
on broad sides - wide  
dry ground in canon  
covered w. thin high grass  
& dotted with small  
some cactus etc.

93 No small, 1 1/4 grown  
on "Sanderson" mesa on hillsides  
2 <sup>imm</sup> in wash - 1 adult in  
other heavy bush on hillside  
1 <sup>imm</sup> in low 'acacia (lept) "

The ad. sprang out of one  
bush and then up into  
another resting there against  
one of the bare stems  
below the terminal  
leaves.

(94) <sup>bush</sup> beaten from low veget  
in valley bottom

2 a few in valley bottom  
on low plants & in grasses

3 10' taken from low  
veget on hillside 4900'

4 <sup>B. To qu.</sup> on acacia low in weeds  
at camp 2 in 1 bush

& 1 100' below in sotol

& 1 100' above in acacia

7 a very few on hillside  
to 4900'

15 canon bottom very  
wide 4800'

19 a few in <sup>narrow</sup> wash of  
canon bottom 4700'-4800'

37 10' in sotol at  
4700'

42 in "weeds" (kept) at  
camp

45 very few on hillside  
at 4700' & 1 in weeds  
at camp

~~faintly common~~

63 in dry grasses on  
hillsides at very few  
4800' - 5000'

72 oaks in canon bottom  
only no taller 4800' - 5000'

71 in weeds at 4800'  
on gentle slope up  
to hills

95 occurs in oaks  
in valley bottom - very  
rare - 4800' - 5000'  
seen on hillside  
above 5000' seen yesterday  
at 5500'

11117

+353 = 11472

~~1 sp. gracilipes/circiata~~  
~~Arctia has a sulphur~~  
~~yellow stripe down~~  
~~the centre of the~~  
~~abdomen ventrally -~~  
~~this was the species~~

P.M. a colony of Atelapha  
found just below camp  
smoothly in those bush (kept)  
one in quickly leaf " "

" " soto

2 <sup>incl. ♀</sup> yellow flower acacia "

their note is a nervous  
zip-zip-zip-zip-zip  
very sharp and distinct  
nearby but with remark  
little carry.

Hoplaphys in dead oak  
leaves at base of cliff  
at the to light 5300'

♂ & ♀ Diapheromera <sup>geminata</sup> round head  
in oaks 12 ft from ground  
climbing about terminal leaves

heard about camp 4700'  
very scarce

$$11472 + 28 = 11500$$

(54) Apr 8.

96 10<sup>th</sup> Millside 100'  
above camp

97 1<sup>st</sup> ~~✓~~ same

$$11500 + 75 = 11575$$

57 / Murrelle Springs, Brewster  
Co., Tex. Sept 8. Elev. 3150-3300

In considerable patches  
of joint cactus - *Cylindropuntia*  
(*Chlorophyllus*)  
occasional *Cylindropuntia*

*Chadon palmeri* - Found  
(*Neotoma* ~~*in groups*~~)  
in small ones very locally  
nest in joint cactus but  
a few also on ground &  
in all-thorn. The ♂ are  
prodigious leapers &  
very quick but <sup>habit.</sup> jump  
into thick of bush  
or cactus and there  
stay motionless unless  
approach closely which would  
make them easy to  
take were it not for  
the invariable surge  
of thorns & spines  
& the great leaps they  
are <sup>capable</sup> of even when in  
the net

~~P. concinns~~ in all-Thorn  
everywhere

Striped melanophis - a  
very few in bushes & once  
low veget along wash  
1 Horn eleg in joint cact  
& very few lephant  
in grasses under Horn  
bushes & jct cactus 10 1/2 <sup>taken</sup>  
Setigera along short  
stream fr spring in  
scanty patches of low  
green grasses.

A. few no of Chenitodes  
seen in all-Thorn.

Cyclops & Boot not  
occure in greasewood  
which bush is here  
dominant on the  
flat edges of the  
slope above the spr.

$$68 + 1 + 11575 = 11644$$

1 R. spirocha ~~in~~ <sup>colony</sup> ~~to~~ <sup>of</sup> ~~the~~ <sup>very</sup>

willow tree in wash 25-30  
ft from ground.

Home ~~cor~~ <sup>occurs</sup> in  
bushes & green ~~veg~~  
in wash ~~stud~~

$$11644 + 7 = 11653$$

low basaltic  
Wash in volcanic hills  
7 mi. waded basalt  
58 / Butte Bone Spruce & 2 mi. S. Persimmon  
Gap. Brewster Co. Tex Sep 9

Elev 2720'.

1 *R. spumosa* in large  
clump of mesquite on  
edge of wash very  
canny beast & very hard  
to take

1 *Set* ~~at~~ light  
*T. tex* not scarce on  
adobe wash places  
down from hills & on  
edges of large adobe  
wash.

*H. ardens* not scarce  
on pebbly volcanic washed  
soil at bases of hills

$$11653 + 58 = 11711$$

3000 ft.

59 Pecoson Map Sep 10

The hillsides covered  
w lecheguilla, some  
port cactus & scattered  
bushes -

Ceph. in ~~gt~~ cactus (~~chon~~)  
(tassayilla) ~~occurs~~. (~~cactus~~)

~~Phab. palmeri~~ in  
(~~nitrosoma~~ ~~in~~ ~~graph~~)  
~~numbers~~ in lecheguilla  
& to be found also on  
ground & in other  
plants & every few

37 Atopsyche all found  
resting head down on  
inner surf. of inner  
lecheguilla leaves.

1 Schisto ~~over~~ in  
bottom of small  
cañon. in ~~the~~ bushes

Many ~~ter~~ ~~occurs~~ &  
very active over  
hills.

Paras. not ~~over~~ in grass  
under bushes etc.

Anacethus very  
scarce in similar  
to last

$$11711 + 95 = 11806$$

60 / Double Windmill Sep 10  
2725 ft.

Temp  $\pm 115^{\circ}$  With very  
active I could be followed  
only by shadow on bare  
bleached adobe between  
dry scattered bushes -

$$11806 + 25 = 11831$$

3160 ft.

Post

Sep. 10

61 / 3 Stagnone at light  
after thunder storm -

Great plane beprested  
near Double Windmill  
flying over plain of  
acacia, mesquite &  
blackbrush

Great yellow murred  
beprested same  
3 miles toward  
Hackberry Creek

621 Garden Spring Sep. 11  
~~Tenax common on~~  
~~Hillside esp in low~~  
~~plants & grasses growing~~  
~~& growing commonly~~  
~~about on ground of~~  
~~broken blocks of~~  
~~Arctostaphylos~~ *sinuata*  
~~on Clematis & acacia~~

11831 + 111 = 11942

63 / Marathon Sep 12, '13

99 occurs in grasses tall

near mid-valley with  
43 which is fairly abdt  
almost all recently adult.

11 as given before the  
ns in rabbit weed -

96 1 $\frac{1}{2}$  on ~~place~~ seen

83 this sp is found  
from Garden Spr  
in very low noo  
in & about the bushes  
of the plain to the  
small hills 1 mi so  
of Marathon where the 1 $\sigma^7$   
was taken Sep. 11

49 the note of this  
sp heard in the area  
is a zue-zue-zue-zue  
somewhat res X. structure  
but louder & sharper  
tho not as loud as Alt sandersoni

100 1 1/2 m high grasses  
on plain.

101 1 m on low bush  
on hill

102 1 1/2 as 100

$$11942 + 461 = 12403$$

Phrynosoma sp 3/7 on  
pebbly plain much  
same loc as Acrocara.

30 This "hill sp" is found  
on rock outcrops by  
numerous fragments  
where these occur  
on plain as low  
as Marathon

$$12403 + 46 = 12449$$

Ser 46 continued 5 pages forward

64 / Sierra Blanca Tex.

Sep. 13, 14 Alt. 4524

El Paso Co. Plain  
& hill slopes of broken  
rocks fragments covered  
w/ greasewood, black  
brush some <sup>low tree</sup> yucca  
sotol etc scarcely any  
grass underneath but  
that green. Adobe  
flats covered now  
w/ tufts of green grass  
in some places dotted  
w/ tree yucca -

Hills & rocky ground  
T. strepera local occul  
~~Best not~~ plant in grass  
Figus occul & blackbr  
& 1 l. nuxton on beaten  
the rocks fragments  
of hillside / Psobessa  
1 H. ardas - In green  
tufts of grasses w/

adobe wash 2 sp  
Paropomala v scarce

~~2 Stamantia on bare~~  
adobe in company w each  
other. 1 Ateloplus there  
in leafless yucca-bush  
1 Didopet beaten fr  
greasewood

$$12449 + 54 = 12503$$

Trupadulus on ~~adobe~~ rare  
Figuro common & widely  
dist in black brush  
The sect present in cert  
areas.

Campyba in well watered  
black brush

2 Mel and gr along edge  
of same

Trans & scatt brush on  
adobe few Parop 2 sp Apeca

Dejot also T. strenua

$$12503 + 50 = 12553$$

65 / Etholen El Paso Co. Tex

Sep. 14 Alt. 4650' - 4750'

1 ~~Campoplex~~ & many Ligula  
in bl brush; in same area  
in grasses few Parop  
1 ~~Agrotis~~ n 1 Cullocara  
occasional Mesotoba On somewhat  
rocky ground & adobe betw  
bushes T. stipes occasional  
1 on Tropidol on adobe  
near scant grass.  
among bl brush.

$$12553 + 27 = 12580$$

66. Antman Mts. El Paso  
Co. Tex Sep. 14. Elev.

4800' - 5400'

1 S mexicana in pocket  
on hillside at 5200'

M. trana ~~perul~~ on  
hillside in grasses

M. aridus, <sup>few occur</sup> Rhodo 1,

~~forked~~ perci Melanophyl

~~occid~~, S. fusworth

occid in bushes <sup>sotale</sup>

The latter in grasses on  
hillside.

~~perul~~ perul in  
grasses at about  
5200'.

Stiraph in  
grassy pocket at 5400'

1 Tyrus at 5000' on rocks

1 Stagnum in green bush  
at 5000'

1 ♀ Heleant

at 4750' on pebbly  
wash

$$12580 + 24 = 12604$$

XXXXX

add to 64' Low desert

Mts to N. Sierra Blanca

Site 14 Elev. 4524' - 4850'

in scattered greasewood

1 At- macrocalus 4950'

1 ad Cyl corollae 4900'

3 ns " 4700'-4900';

1 Mr. Lirica 4750' hillside

2 ns Acrocarpa 4600'

on plain

1 Diaph in grass 4700'

yellow flowered bush

2 Pseudos on hillside

$$12604 + 63 = 12667$$

See 67 continued 7 pages ~~not~~ forward

67 Franklin Mts. El Paso  
Tex. Sep. <sup>15</sup> 1881. Elev. 3800-5500'

In small patches of grass  
usually in lecheguilla  
or joint cacti Acanthaceae  
occasional, the males  
very active jumping flying  
& hiding in most inaccessible  
places females relying on  
hiding more often but  
when roused out very  
quick tho not as so from  
3800' to 4800' usually  
along small water courses  
on hillsides

Mr. T. T. T. on more  
bare slopes of lecheguilla  
some greasewood few  
grasses & over desert  
plants from 4500' to  
summit - 2 Aprus  
♂ at 4600' ♀ at 4900'  
mel. desert scarce

in rabbit weed & other  
low plants on outer  
side 4600-5000'

H. aridus on bare  
muddy wash at 4000'  
Acrotopus in greasewood  
at 4100'

Hornilia in greasewood  
in flat 3900'

~~Ceratites in greasewood  
3900' in flats to  
summit - much the  
most plentiful from  
about 42-4500' where  
every other bush (while  
there are rather scat.  
among great var of  
desert veget) would  
disclose from 1 to 3  
on the mesa & flats  
of solid greasewood. The  
insects were by no  
means plentiful~~

the insects nests during  
the day on the middle  
of the terminal twigs of  
the bush, head down  
with fore legs extended  
together & antennae between  
the tips of these just  
touching the stem on  
which they rest. Hanging  
loosely - The only  
individual found sitting  
on the tops of the  
leaf clusters were 2 or 3  
of the grisea phase ns.  
A nymph when  
removed a 2 foot from  
a green bush climbed  
about nervously up  
grass stems and  
over rocks - at first  
it was erratic but  
quickly afterward  
made for the bush

~~climbed up to a  
terminal leaf cluster.  
I assumed the usual  
attitude.~~

Paros very scarce in  
grasses of flat at  
3800'

M. herbaceus scarce  
& Arctophila (not taken)

Boottia common in  
greasewood everywhere

Acanthus in beating  
greasewood at 3800'

Opeia (not taken)  
very scarce in grasses  
on upper slopes 4500'

-5000' Syrphula same  
4200' - 5000'

$$12667 + 221 = 12888$$

68 / El Paso - Rio Grande <sup>Elev. 3700'</sup>  
River bottom Sep 7<sup>th</sup> - (kept)

In weeds, "rabbit weed", mesquite  
& wild sunflower growing  
rather thickly on bare adobe

3 Diaper, 2 Diaper  
beaten from "rabbit weed"  
series Hamel beaten from  
same & low mesquite  
mel. arundinis fairly  
abdt in same.

Murmur same thru  
this place

mel - herbaceus common  
same

M differ same

M yampes very occul  
about mesquite

S shoshone fairly  
common thru place.

J. vire very common  
in open spots

J. rubripes common locally

no more grassy low  
spots along river ex.

Hesperot all beaten  
from "rabbit weed" no  
more seen.

Europt Tex no common  
on bare adobe.

Acrotop regalis?? common  
in low thick <sup>gray-green</sup> bush!

M. latrans occurred in  
woods fine-rub same

T. vire makes a  
whirr as it flies up  
esp ♂ of a number  
(usually 4 to 6) distinct  
rapid ticks -

T. rubripes makes a  
continuous whirr not  
as sharply - also more  
pronounced in males.

E. Tex makes a similar  
whirr to latter but more distinct.  
These noises can best be compared  
to tearing linen sound

67 continued — On mesa  
at 4000' 1 ♀ Aerocara mesa —  
on bare ground dotted w  
low greasewood & scattered  
over with "after rain, yellow  
daisies" — 1 Mesito capitato  
there also — 1 Africa in  
grasses on hillside at 4200'  
a few M. texana there also  
Scirpus stenusa occurs on  
mesa top, S. ovus  
common otherwise  
practically 0.

Phedusa & Acanthura as  
before 1 Hel. arides mesa top 3900'

$$12984 + 62 = 13046$$

Sept 16

69 El Paso, At night 4000'

2 Arcturaea ♂ in ballast

under a light

All these are Hemulidae

(abundant in present

strata, under light)

$$12046 + 30 = 12076$$

Culberson

70 / Kent ~~Et Paso~~ Co Tex Sept 17

Elev: <sup>3900'</sup> ~~4000'~~ <sup>4100'</sup> ~~4200'~~ Adobe draw

dotted in some places heavily  
w blackbrush; some areas  
of green loose growing grass.  
occasional tree yuccas, sotol,  
Hesperaloe & other desert  
plants. Lycium common  
in blackbr on flat.

Mesquite occasional in  
grass spots, Atriplex

There very few, Pharbitis  
also 2, 2 Trine latic  
Anticarsa There occasional

1 Cordillaria also,

1 Asanthus in grasses  
under bush, 1 Asanthus  
at night atrid on fly,  
& continuously on a  
tree yucca, 1 Pharbitis  
on sotol, Mel. longicauda  
in blackbrush - a few  
few Mel. longicauda in tall

grasses near water on  
R.R. 1 Cynophya in  
grassy spots. 1 Crucifera  
beaten from the tufts  
of grass. 1 Dichapetalum  
on low bush. Hoplopappus  
a few found in grass.  
There were found in  
dark spots & under  
dead tree yucca ones  
of Atelopus taken at  
night ♂ & ♀ from Robertia  
spumosa, 1 greasewood,  
1 in tree yucca others in  
various other desert  
bushes. none occurred.

$$13076 + 70 = 13146$$

Hunt Sep 18 - Elev 4000'-4200'  
On limestone broken down  
plateau covered w scattered  
desert veget - chiefly aromatic  
gray-white bush, sotol, some  
lechuguilla, greasewood etc.  
great scarcity. Little -  
ms of Chenopodium very  
scarce beaten from these  
low bushes & 2 sp red  
leg Trinero on Thur  
fills on broken limestone  
fragments on best soil  
3 lechopet in black brush  
at 4200. Washing sticks  
beaten from aromatic  
gray-green bush & most  
of Stagnum there & few  
in other low plants  
1 Phrynosoma at 4100  
in grasses in pebbly wash  
1 Lamprolaima from aromatic  
gray green bush. & Cycloptilum

heard common at  
night under all  
desert shrubs - 2 beaten  
from Mesquite wood -  
(~~from lab. (something)~~)

$$13146 + 57 = 13203$$

71 / Pecos, Pecos Co., Tex.  
Sept. 18 Elev. 2596'

An adobe flat, ground  
heavily coated w alkali  
dotted w bunches of  
coarse grass, much  
low salt bush and  
in some places low  
mesquite. The bare  
adobe ~~*Trepidulus*~~  
fairly numerous  
but very shy in  
scattered colonies.  
~~*depress. nigra*~~  
~~*leg. tenuis*~~  
also on bare adobe  
& exceedingly shy -  
widely distr., occas.  
*T. virens* ubiquitous  
*Parop* occas in  
coarse grasses /  
*Opelia* there - 35.  
*longipennis* on bare  
adobe. See small

area of "salt grass"

at sink of small  
stream. Chrysothrix  
in small nos 1 Eucalypt  
1 Tru rubripes on alkali  
encrusted adobe.

$$13203 + 95 = 13298$$

72 / midland, midland Co  
Tex. Sept. 19 Elev. 2779'

Slightly rolling prairie  
of sandy adobe loam  
dotted w clumps of  
low mesquite & very  
scarcely covered with  
low grass. In some  
places are large areas  
w little or no mesq  
overgrown w feathery  
yellow grass 6-10 in high  
and in the depressions  
are areas of green  
grasses usually surr.  
by heavier mesquite  
In one area <sup>(this refers to a "prairie")</sup> of thick  
fairly high grasses  
& plants little  
was found abdt  
elsewhere very scarce  
In mesq about  
defor under thick

Barrenland grew rank  
~~Rehnia~~ ~~dict~~ several  
heard toward noon  
strid vigorously but  
not as loud as at  
night - exceed on  
the alert they ceased  
singing always before  
could be located &  
so I were Talseen in  
great diff - the  
bare patches of  
ground among <sup>short</sup> green  
grass there Eucrypt  
in not large colonies  
ants common, a  
few of the latter  
swarmed over  
plain - <sup>under</sup> the trees of  
the plain 2 or 3  
M. glaucipes; Syrph  
aeutic occurred there  
common in "prairie" area

A very few Boopis  
as Euphorbia & in "prairie"  
area" also

Campylac in small  
mos in "prairie" area  
a few in tax wood in  
depression and one  
or two under mesq on  
plains

Auloc very scarce  
in short dry grass  
over plain.

Acroc ~~maculif~~ 1 ♂  
as last

Dactylot 3 ♂ as last.

Phlit very scarce  
but found in all  
conditions

D. longipennis occul  
as Dactylot

I. vire occul over  
plain, common along  
roads

Lepus thulei very  
scarce on plain

Hare same.

L. latii ? 1 on plain

M. different 17 "prairie"  
area

2 Hipp. rufosus on  
plain.

Cec. 4-punct common  
"prairie" area

~~Silene acaulis widely  
spread over  
plain.~~

1 Styr. stenosoma on  
thistle in prairie  
area, it tumbled  
hastily into the grass  
below & hid in the  
thickest of it.

M. fuscus - a local  
in "prairie" area

M. packardii same &  
very few in depressions

mel. 42-Marathon no.  
in large nos in  
prairie area, widely  
dist. over plain &  
fairly common about all  
lgs.

M. blue-leg fenders-like  
common in "prairie"  
area only, very scarce  
about other riparianous

Arphia pseudoniet  
one coll. colony on, in  
bare spots among bar-  
nack in Helianthus diversiflorus.

Parops wyoni not scarce  
widely dist. over grass  
on plain esp. further  
white grass.

Cyrtus depressus very  
common in "prairie"  
area only.

Meloidae diversiflorus

mt. same blue-leg boy  
weighed very scarce  
in "prairie" area only.  
(watch this specimen - easily  
confused with others -)  
P.M.

S. americana 1/2 in  
depression.

Musca capito ?? 1 on  
edge of depression  
in short dry grasses  
Tropid formosus 2  
dances

atyp. n. series

Diapheromera series  
Taken from small  
mesquite clumps on  
plains - over area  
examined they were  
to be found on about  
every other bush  
usually 1 or 2 or 3 but  
as many as 6 taken  
from one bush once

NOTE The very small ♀ is adult -  
it contained 1/2 developed eggs  
They were found  
resting on the terminal  
twigs & leaf clusters &  
differed from Ceratites  
in resting almost  
invariably with head  
pointing away from  
bush - the ♂s were  
frequently resting  
on the top of the  
foliage but the  
females were invariably  
hanging from the  
twigs & leaf clusters  
in the latter when  
usually in pairs

$$13298 + 316 = 13614$$

73 / Sweetwater, Nolan Co.  
Texas. Sept. 20, 1912

Elev 2100-2200 ft rather  
rolling somewhat  
dissected country of  
sandy red loam  
dotted w mesquite  
trees w very little  
very dry grass &

plants on ground.  
Depressions choked  
with beardock, wild  
goose, sunflower etc.  
In river valley bottoms  
are other trees beside  
mesquite such as cotton-  
wood, dwarf walnut  
white. great clumps of  
prickly pear abound

T. citrina common in  
colonies along sandy  
banks of stream

T. vine common over prairie

M. robustus occurs in scattered plants under trees in bottom land.

M. differentialis common in burdock & high weeds in depressions.

M. packardii occurs same

M. Boegströmii - common same and occurs in bottom scant veget.

M. atlantis common locally in late <sup>grass</sup> weed patches in bottom

Opria scarce same

Chort 3 " "

M. fenn mbr 1? "

M. laticus 1 "

Arphia 2 "

Hippiscus 1 as differentialis

Sordidix "

Syrb fairly numerous

same & occurs in low plants everywhere

but esp in bottom land  
Rhina victorica a  
few heard in mesquite  
trees & 1 in dwarf walnut  
none taken.

Sph. crestatum numbers  
in bottom land.

Oec. common in weeds.

Phib. very scarce in  
bottom.

$$13614 + 162 = 13776$$

# Dallas Region

- 1 ~~Lilanthus~~
- 2 ~~Stagmomantis~~
- 3 ~~oligodactylus~~ Diapher
- 4 ~~oniscus~~ " ~~Tam~~
- 5 Syrb admirabilis
- 6 " acuticornis.
- 7 Mermiria bivitt
- 8 " neonex
- 9 Opria
- 10 Scopodora
- 11 Arphia pseudoniet
- 12 " carinata
- 13 " luteola
- 14 Hippisc megosus
- 15 Anisotopus Thomasi
- 16 " caputo?
- 17 Proboscis texana
- 18 Ageneot deorum
- 19 Tricero ruculato
- 20 " bruneri gr.
- 21 Hadrot 3-fasc
- 22 Spharag aequale
- 23 " cristatum

- 24 Hesp viridis
- 25 " prateris
- 26 " speciosus
- 27 ~~Campyla~~ veg ??
- 28 Melanop differentialis
- 29 " atlanticus
- 30 " glaucus
- 31 " 3 ceru blue leg
- 32 " packardii
- 33 " lakini
- 34 " scudderii tex
- 35 Hypochlora alba
- 36 Melanoplus robustus
- 37 Dactyloctenium v. small
- 38 Stenocranus stevensoni
- 39 " plane eastern
- 40 ~~Conocephalus strictus~~
- 41 ~~Neonotus crepidula~~
- 42 Mesochorus abortiva
- 43 Rhinoceros 4-macul
- 44 Aec 4-punct
- 45 " yellow am
- 46 " batipennis

- 47 *Schistocerca americana*
- 48 " *lineolata* (?)
- 49 *Cortopha viridifasc*
- 50 *Dissost carolina*
- 51 " *longipennis*
- 52 *Leucostropis cubana*?
- 53 *Anthrax gracilipes*
- 54 ~~*Psyllomyia*~~ *+*
- 55 *Spharagnum bolli*
- 56 *Tyrus wheeleri*
- 57 ~~*Thyridox*~~ *utleri*
- 58 *Euclyptopus texensis*
- 59 *Arphia sulphurea*?
- 60 *Scaevola texensis*
- 61 *Tomonotus agilis*
- 62 *Archelimum clunensis* sp.
- 63 *Hippiscus corallipes*
- 64 *Amblycorypha utleri*?
- 65 ~~*Stenonotus lineata*~~
- 66 ~~*mesoleia abortiva*~~
- 67 *Conoccephalus fasciatus*
- 68 *Sch. daemigra*
- 69 *Euclyptus costalis*
- 70 ~~*Optilimum*~~ *aquasum*
- 71 *Neelacorydus plebeius*

70 ~~Cyrtopleura~~ small

71 " larger

72 Dich viridis



74/ Cisco, Eastland Co. Tex.  
Sept. 21, 1912. 1450'-1550'

meadows of high green  
grass dotted along  
stream w thick clumps  
of post oak - Hills  
very along bare spots  
covered w short yellow  
grass not nearly post  
oak with small areas  
of thick low bushes -

- 1 on hill slope in  
rocks & short grass
- 2 on bank of mesquite  
striking protect reserve.
- 3 from bunches of coarse  
reddish grass on edge  
of oak woods (kept)  
much work others
- 4 all in <sup>D. T. T. T.</sup> terminal  
twigs of mesquite  
pair of corks in  
terminal leaves

5 common in meadow  
along stream

6 very common same  
and abdt on hill  
among low bushes also

7 common along stream  
& in meadow

8 same locally in  
greater nos - Not  
nearly as active as 7  
and no much more  
closely over grasses

9 very few in meadow

10 2 same

11 & 12 1 of each same

12 - 2 on edge of oak  
woods in open spaces

14 large colony as 12 and  
also scattered over

meadow - There the  
2 orange w 7 along str

15 common in open  
everywhere but esp

on hill slopes

~~16 very common on~~

Hill slopes.

17 on in grasses on  
edge of oak woods

18 common in meadow

19 very few on hill

20 common about  
rock strewn parts of  
hill

21 colonies in mead.

22 few same

23 fairly common same

24 common same

25 very common same

26 very common same

27 very scarce in grasses

on edge of oak woods

28 common in mead,

some feeding on sage

29 common in meadow

not scarce in weed (lyt)

on edge of mead

- 28 in large mos about  
etc and in clumps  
of oaks  
29 scarce in mead  
30 common in oaks  
both in mead & on hill  
31 <sup>very</sup> common in mead  
32 <sup>common</sup> scarce  
33 very scarce same  
34 scarce about oaks  
in mead & on hill  
35 fairly apt in  
small patches of dry  
36 common in oaks  
37 very scarce on  
bare patches near  
edge of meadow  
38 1/2 in high grasses  
on edge of etc  
39 all seen taken  
in high grasses in mead  
40 ~~very~~ scarce same  
41 ~~1/2~~ same

42 in short grasses  
on edge of oak woods  
no common O ads.

43 ~~occur~~ in short  
grasses ~~up~~ on hillside

44 occur in grasses  
& weeds along str  
to

46 no beaten from  
at shoots on edge  
of oak woods

47 2 seen by edge  
of woods in meadow

48 This is the smaller  
green yellow line marked  
Och - 13' deep not taken  
in oaks up stream

49 a very few along in mead

50 occur but <sup>very small</sup> much flatter  
up stream -

51 in mead & across

52 common on bare soil  
up along stream

$$13776 + 402 = 14178$$

Cico Sept 22.

48 These may not be  
the same as the one  
seen yesterday - it was  
the typical small green  
yellow lined sp. - These  
were taken in similar  
site on oaks but are  
all yellowish.

50 <sup>fairly</sup> common along roads

53 in grasses on  
stream bank. Three  
meadows beaten

54 ~~same~~

55 1 only seen & taken  
in oaks

56 very scarce in  
large open space  
in oaks covered w/  
short yellow grass

57 ~~beaten~~ for oaks

58 1 taken in meadow

11 quite a small  
colony on edge of oaks

14 The reddish orange  
winged specimens  
may be diff sp. - They  
were certainly more  
active & flew farther  
than almost any yellow  
winged vidua.

37 numerous colony in  
short yellow grasses  
about low clusters of  
oak shoots - very  
occasional elsewhere

38 & 39 both occasional  
about low clusters of  
oak shoots in field  
& on edge of woods

39 much more numerous  
than 38 and could be  
heard singing etc faint

zip zip zip

63 1/2 only in <sup>low</sup> grass beside road

14178 + 202 = 14380

751 Weatherford, Parker Co.  
Tex. Sept. 23, 1912. Elev.

1000' - 1100' -

- 1 ~~Water~~ from wind
- 2 18 ~~same~~
- 3 in grasses & low  
plants, growing in open  
on ~~the~~ top of small forest.
- 5 mod common in low  
veg
- 6 very common in  
same as 3 in low places  
& about oaks
- 7 scarce in high grasses
- 9 occul in low yellow
- 14 common as 3 & widely  
dist
- 15 same
- 16 very occul as 3.
- 18 scarce " "
- 19 very " " "
- 20 fairly num loc " "
- 21 very scarce " "

- 23 fairly common on bare soil in lowlands etc in cotton patches
- 27 not ~~seen~~ in pine plant
- 28 fairly abdt in cotton
- 29 common as 3 & widely distr in cotton etc
- 30 occul among oaks
- 31 occul as 3 & widely distr
- 32 very scarce as 3
- 34 scarce about oaks only on ground among shoots
- 36 1 ♀ seen not taken " "
- 42 no com in short dry yellow grass areas
- 44 com in weeds
- 47 occul among weeds & about oak groves
- 48 a few in cotton only
- 50 fairly com along roads
- 52 common as 23
- 53 1 as 3

54 as ~~3~~ much work to  
get ~~small~~ series

58 occur as 3

59 17 " "

60 fairly common on weeds  
esp about oak groves  
& on oaks

61 fairly common Locally as 3

62 occur in patches

of high grass in cotton

& one up to 1 ft in oak

64 in low woods, part as 3

$$14380 + 197 = 14577$$

76 Temple, Real Co. Texas

Sept. 24, 1912 V. High

and greatly muddering -  
Rolling black earth country  
almost entirely under cultivation.  
In grass areas E. costalis  
common, E. texensis  
quite numerous same  
where wood exposed black  
earth was to be found

S. americanus occasional  
m. differ in weeds fairly <sup>common</sup>  
m. atlanticus ubiquitous common  
J. citre common in bare places  
A. longip 1 on prairie  
Hipp common in colonies  
in grassy areas

Carex ~~occasional~~ in weeds

Orphid in grassy areas

Orphid common areas of  
low grass S. actus &

common in grassy areas

the by not occasional "

Agavecot same, only 1.  
Misto same same.

14577 + 53 = 14630

~~Sundewea there.~~

P.M. Along the bordered  
stream — at water edge  
Tethys occid & 1 Cyclopt  
1 Occ pink head beater  
from heavy grass veg  
along stream. Arctif  
There also 1 up in low  
bush & or 5 ft ft ground.  
Syrb fuscos — about 6  
seen in weedy spots  
along edge of woods, all  
in one field — nowhere else  
M. plubey occid in  
tall grass "open" area  
in field and sap.  
as A. fuscos

14630 + 77 = 14707

77 Dallas Texas, Sept-25-  
Weather downright cold.

In field of tall grass on  
edge of woods - Mel  
sh w occasional - Campoplex  
r scar S. aculeatus occasional  
S. admir common Murph 1  
Cyclopt squam 1 ♀ not taken

In large area overgr  
w short grass & with  
over w occasional weeds  
Chry 2 sp? very common  
E. costalis common in colonies  
E. texensis rather scarce  
Mesoch common in colonies  
M. atl occasional. M. diff  
in high grass. 2 Scudd  
in bushes in woods  
1 S cristat on edge  
of woods

♀ seen to have solid band  
& males spot

14709 + 249 = 14958

Dallas Sept 26 -  
1 Arctiaea in short  
grasses between oaks -  
Mesoch no (1 ♂ ad) common  
there - Among oaks in  
savane 1 Sch. lineata  
in low clumps of  
oak sprouts 2 S. laevis  
In ~~nearby~~ grasses no  
~~Arctiaea~~  
2 of Muricaria  
scarce in field of  
high grass - M. neomex  
also in grasses among  
oaks. Chort there  
Vacc 2 seen & taken  
I. citr & common in  
roads - Spid common  
in some places in  
woods & oaks &  
mesquite - P.M.  
Mesquite area  
2 S. laevis in with

on upper frays  
of ~~Emergite~~

Diapher ocul ~~both~~  
in grasses among  
oaks and 2 in field  
of high grass. ~~There~~  
common & Oecant also

$$14958 + 177 = 15135$$

78 / Saganmore Hill, Tarrant  
Co. Texas Sept 27, 1912. 650 -  
In area of shin oaks  
w undergrowth shrub oak sprouts,  
smilax & some low bushes,  
occasional patches of grass  
some yellow flowers  
weed & ~~Campy~~ weed -  
~~Campy~~ not scarce  
in latter - Under  
of oak woods M. glauca  
rather scarce M. scudderi  
occasional - nearly common  
but widely distr. A.  
carinata occasional in  
open spots - 2 S. bolli  
same - 1 S. americana  
seen not taken -  
In field on edge of  
woods one colony of  
Chort - 1 vic there  
citrina common in

roads - in low grass  
areas in open Open  
scarcely, or few Pyralis  
1 X strut on, X sp  
fairly common & dec.  
Hipp not scarce there  
2 w orange wings - as  
usual much more  
active than the yellow.  
Sould <sup>fair</sup> common in  
rains -

$$15135 + 180 = 15315$$

End of 1912 trip

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